Original

Operating Instructions

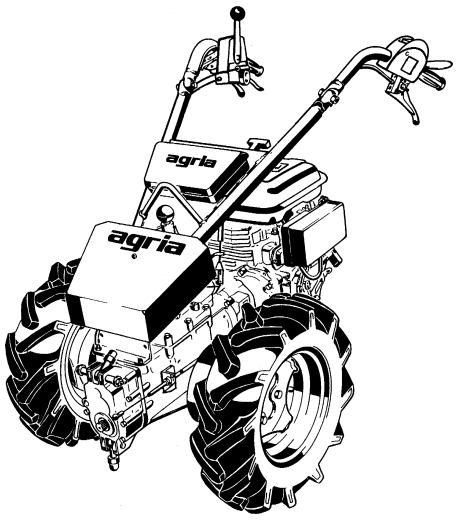
Tool Carrier 5500 Grizzly

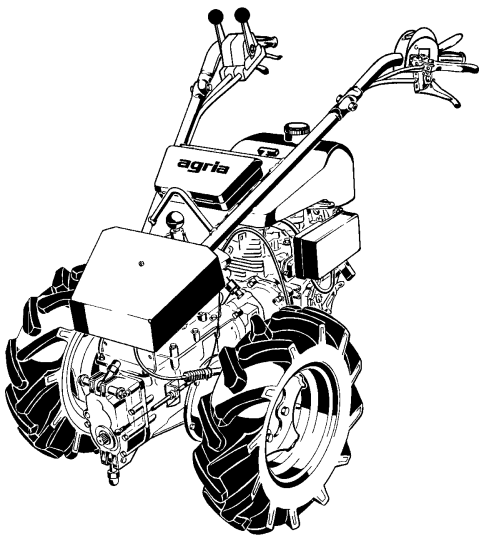
- compact
- comfort
- premium

compact:
- Differential
- Safety hillholder
- Petrol engine EH 25 D

comfort:
- Differential
- Safety hillholder
- Petrol engine EH 34 D

premium:
- Steering brake clutch
- Brake central
- Petrol engine EH 25 D
- Petrol engine EH 34 D





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Before commissioning the machine, read operating instructions and observe warnings and safety instructions.

CE

Operating instructions No. 998 766-B 05.10

GB

Please complete:

Machine Type No.:.....
Identification No.:
.....
Engine Type:.....
Engine No.:.....
Date of Purchase:.....

For name plate, refer to p5/fig. A/17.

For Engine type and number, refer to p40/fig. D/1.

Please state these data when ordering spare parts to avoid wrong deliveries.

Only use original agria spare parts!

Specifications, figures and dimensions stated in these instructions are not binding. No claims can be derived from them. We reserve the right for improvements without changing these instructions.

This delivery comprises:

- *Operating instructions*
- *Tool carrier*
- *Tool kit*

Symbols

Warning – Danger

Important information

Choke

Fuel

Oil

Glue

Air filter

Clutch

Forward

Reverse

PTO

Brake

Parking brake

Engine Start

Engine Stop

Engine oil level

Air cooling

Transmission oil level

Visual check

Mowing drive

Wheel drive

Fast

Slow

Differential lock

Tyre air pressure

Open (unlocked)

Closed (locked)

Clockwise

Anti clockwise

Grizzly compact, comfort with Differential

Fig. A

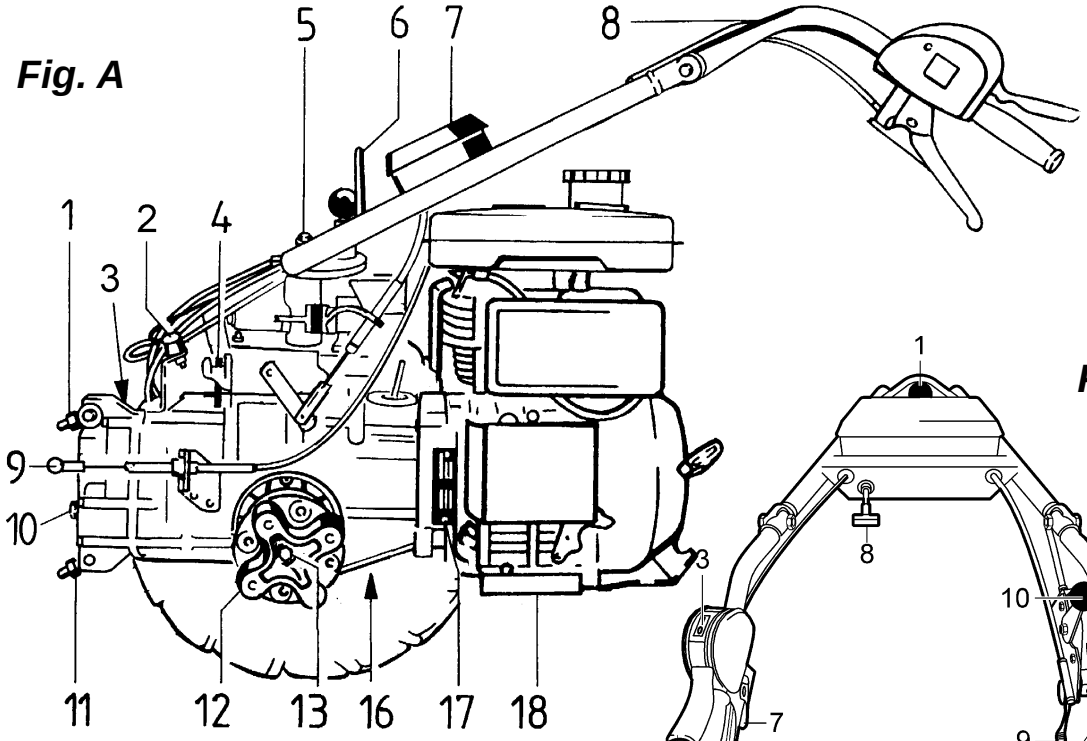
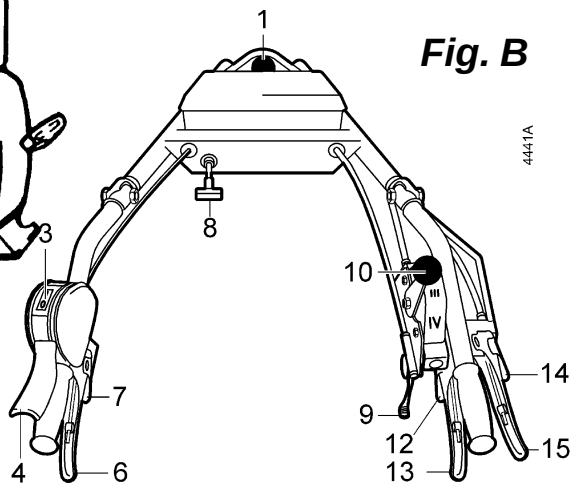


Fig. B



Grizzly premium with Steering brake clutch

Fig. A

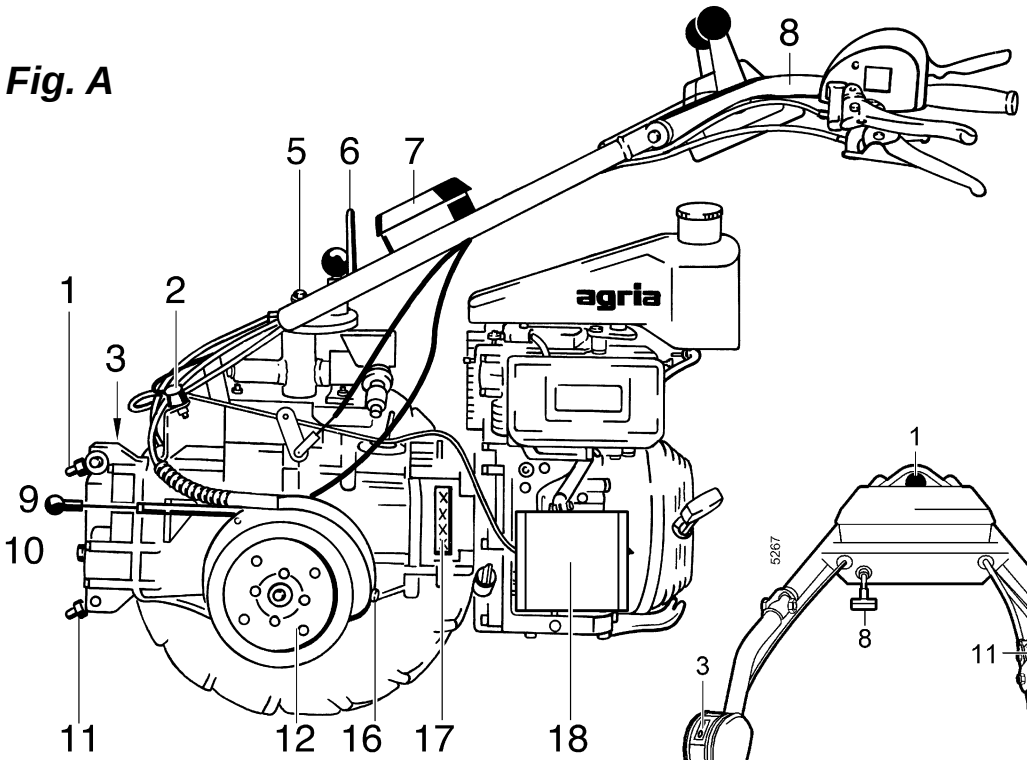


Fig. B

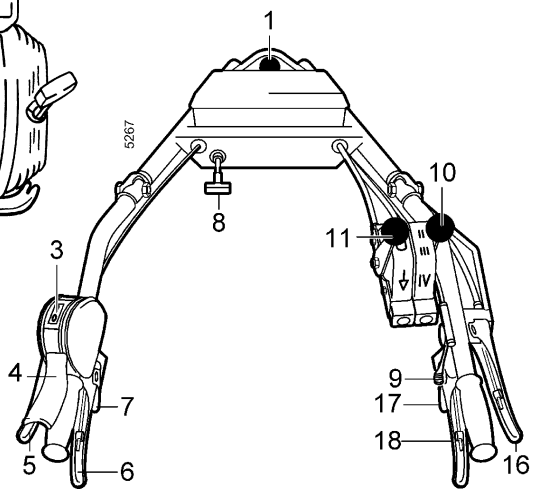


Figure A

1 Eye bolt with cap nut, top
2 Hood-receiving spherical button
3 Transmission oil filling opening and oil dip-stick
4 Disc brake (safety hillholder)
5 Hexagonal nut for steering handle central mounting
6 Hooked yoke for retaining rope
7 Tool kit
8 Steering handles
9 PTO shifting mechanism
10 PTO
11 Eye bolt with cap nut, bottom
12 Wheel hub
16 Transmission drain screw
17 Name plate/Identification no.
18 Engine

Figure B

1 Locking bolt for lateral steering adjustment
3 Engine-off-switch
4 Safety shifting lever
5 Hand lever for steering brake clutch, left
6 Hand lever for clutch and safety hillholder *(Vers. compact, comfort)*
6 Hand lever for clutch *(Vers. Premium)*
7 Pawl for hand clutch lever
8 PTO shifting mechanism
9 Speed control lever
10 Gear shifting lever
11 Locking lever for R shifting *(Vers. compact, comfort)*
11 Gear shifting lever F-R *(Vers. premium)*
12 Pawl for F-R shifting
13 Lever for F-R shifting
14 Pawl for differential lock
15 Lever for differential lock
16 Hand lever for steering brake clutch, right
17 Pawl for parking brake
18 Lever for brake central

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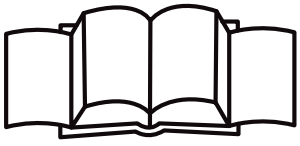


Note fold-out pages!

Fig. A + B 3

Fig. C 56

Fig. D 60

1 2 3 4 5 6

Lubricants and Anti-Corrosive Agents

Use the specified lubricants for engine and gearbox (see "Specifications").

We recommend using ***bio-lubricating oil*** *or* ***bio-lubricating grease*** *for "open" lubricating points or nipples (as specified in the operating instructions).*

We recommend using bio-slushing oil for preservation of machines and implements (do not apply on painted external covers). Oil can be brushed or sprayed on.

Anti-corrosive agents are environmentally friendly and degrade fast.

Using ecologically safe bio-lubricants and bio-anti-corrosives, you contribute to environmental protection and to the wellbeing of humans, animals and plants.

Fuel

This engine runs smoothly on commercial ***unleaded regular and supergrade petrol,*** *on* ***leaded supergrade petrol*** *and* ***Aspen 4T petrol****.*

Do not add oil to petrol.

If, for environmental reasons, you use unleaded petrol, make sure the fuel is drained completely when shutting down the engine for more than 30 days. This is to prevent resin residue from depositing in the caburetor, fuel filter, and tank. Or add a fuel stabilizer.

For further instructions refer to "Engine Preservation".

Maintenance and Repair

The trained mechanics of your agria workshop carry out expert maintenance and repair.

You should only carry out major maintenance work and repairs on your own, if you have the proper tools and knowledge of machines and internal combustion engines.

Do not hammer against the flywheel with a hard object or metal tools as it might crack and shatter in operation causing injuries and damage. Only use suitable tools for pulling the flywheel.

Before starting the engine, read the operating instructions and note:

Warning

This symbol marks all paragraphs which affect your safety. Pass all safety instructions to other users and operators.

Due Use

The tool carrier is a hand-controlled automatic single-axle machine which can power and/or pull various implements approved by the manufacturer. Areas of application are for such as turning over the ground, mowing grass and meadowland, snow clearance and sweeping (due use).

Any other type of operation is considered undue. The manufacturer is not liable for any damages resulting from undue use, for which the risk lies with the user alone.

When the tool carrier is used on public roads, the local national road traffic rules must be observed, e.g. reflectors, lights.

The tool carrier is not intended for use with a trailer on public roads or as as a tractor unit without implements.

Due use includes compliance with manufacturer's instructions on operation, maintenance and repair.

Any unauthorized changes to the machine render manufacturer liability null and void.

General Instructions on Safety and Accident Prevention

Basic Rule:

The standard accident prevention regulations must be adhered to, as well as all other generally accepted rules governing operational safety, occupational health and road traffic regulations.

For drives on public roads, the national traffic code applies.

Accordingly, check the tool carrier for road and operational safety each time you take up operation.

Only persons familiar with the machine and instructed on the hazards of operation are allowed to use, maintain and repair the machine.

Teenagers of 16 years or younger may not operate the tool carrier!

Only work in good light and visibility.

Operator's clothes should fit tight. Avoid wearing loose fitting clothes. Wear solid shoes.

Note the warning and instruction signs on the machine for safe operation. Compliance is for your own safety.

When transporting the machine on vehicles or trailers outside the area to be mowed, ensure that the engine is turned off.

Careful with rotating tools – keep at a safe distance!

Beware of coasting tools. Before you start any maintenance or repair on them, wait until tools have come to a complete stop.

Foreign powered parts shear and crush!

Riding on the attachment during operation is not permitted.

Implements and their weight affect the driving, steering, braking, and tip-over characteristics of the machine. Therefore, ensure steering and braking functions are sufficient. Match operating speed to conditions.

Do not change settings of governor. High engine speed increases risk of accidents.

Working Area and Hazardous Area

The user is liable to third parties working within the machine's working range.

Staying in hazardous area is not permitted.

Check the immediate surroundings of the machine before you start it. Watch out for children and animals.

Before you start work, clear the area from any foreign object. During operation, always watch out for further objects and remove them in time.

For operation in enclosed areas, ensure that a safety distance is kept to enclosures to prevent damage to tools.

Operation and Safety Devices

Before you start the engine

Become familiar with the devices and operating elements and their functions. Above all, learn how to turn the engine off quickly and safely in an emergency.

Ensure that all protective devices are mounted and positioned to provide protection.

With no implement mounted, make sure PTO-shaft is covered with the protective cap.

Starting the engine

Do not start engine in closed rooms. The carbon monoxide contained in the exhaust fume is extremely toxic when inhaled.

Before you start the engine set all operating elements to neutral or idling position.

For starting the engine, do not step in front of the machine and the implement.

Do not use assist-starting liquids when using electrical assist-starting devices (jumper cable). Danger of explosion.

Operation

Never leave the operator's position at the steering handle while machine is at work.

Never adjust the operating handles during work – danger!

During operation the operator must keep at a distance as defined by the steering handle, especially when turning the machine.

Riding on the implement during operation or in transport is not permitted.

If clogging occurs in the implement, turn off the engine and clean the implement with an appropriate tool.

In case of damage to the tool carrier or to the implement, immediately turn off the engine and have it repaired.

If steering causes problems, immediately bring the machine to a halt and turn it off. Have the malfunction removed without delay.

To prevent the machine from sliding on slopes, make sure it is secured by another person using a bar or a rope. This person must be located at a higher position than the vehicle and at a safe distance from the attachment at work.

If possible, always work horizontally on the slope.

End of Operation

Never leave the machine unattended with the engine running.

Before you leave the tool carrier, turn off the engine.

Secure tool carrier against unauthorized use. If machine is equipped with ignition key, remove the key. For all other versions, remove spark plug connector.

Implements

Only mount implements with the engine and PTO switched off.

Always use appropriate tools and wear gloves when changing implements and parts thereof.

For mounting and dismounting implements bring support leg into proper position and ensure stability.

Secure machine and implements against rolling off (parking brake, wheel chocks).

Beware of injuries while coupling implements.

Mount implements as specified and only couple at specified points.

Secure machine and implement against unauthorized use and rolling off when you leave the machine. If necessary, install transport or security devices and secure.

Mowing Attachment

Handle with care! Sharp blades of the cutter bar may cause injuries! Remove protective knife strips only for mowing and refit immediately after work has finished.

For transport and storage always mount the protective knife strips. Secure finger bars additionally with tension springs.

Do not transport the dismounted cutter bar without protective strips.

Before mounting and dismounting the cutter bar, make sure all blades are protected by the protective strip.

To exchange the mowing knife and to mount/dismount the knife driver, make sure that you turn screws away from cutting edges.

For grinding the mowing knives, always wear safety goggles and gloves.

Weights

Always fit weights onto appropriate weight mounting devices.

Snow Clearing

Ensure snow dozer is mounted correctly! Wear slip-proof shoes.

When swivelling the snow dozer watch out for crush and shear points. Adjust working speed to conditions. Operator may be injured when the mache comes in contact with solid objects.

Maintenance

Never carry out any maintenance or cleaning with the engine running.

Before you work on the engine, always remove spark plug connector (petrol engine only).

Check regularly and, if necessary, replace all protecting devices and tools subject to wear and tear.

Replace damaged cutting tools.

Always wear safety gloves and use proper tools when exchanging cutting tools.

Do not carry out repairs like welding, grinding, drilling, etc. on structural and safety-relevant parts (e.g. coupling devices)!

Keep machine and implement clean to avoid risk of fire.

Check nuts and screws regularly for tight fit and re-tighten, if necessary.

After maintenance and cleaning, ensure that you re-install all safety and protective devices and adjust them properly.

Only use original agria spare parts. All other commercial spare parts must correspond to quality and technical requirements specified by agria.

Storage

It is not allowed to store the machine in rooms with open heating.

Never park the machine in closed rooms with fuel left in tank. Fuel vapours are hazardous.

Engine, Fuel, and Oil

Never let the engine run in closed rooms. Extreme danger of intoxication! For the same reason, also replace damaged exhaust pipe immediately.

Be careful when dealing with fuel. Great danger of fire! Never refill fuel close to open fire, inflammable sparks or hot engine parts. Do not refill fuel in closed rooms. Do not smoke when refilling!

Refill only with the engine switched off and cooled down.

Do not spill any fuel, use a proper filling device.

In case of fuel spillage, pull the tool carrier away from the spillage before you start the engine.

Make sure fuel is of specified quality.

Store fuel in approved cans only.

Store anti-corrosive agents and stabilizing liquids out of reach of children. If sickness and vomiting occur, see a doctor. If fuel has contacted eyes, rinse them thoroughly, avoid inhaling of vapours.

Read and observe enclosed instructions.

Before you dispose of opened and seemingly empty pressurised tins (e.g. of assist-starting liquids) make sure they are completely empty. Empty them in ventilated places safe from spark formation or flames. If necessary, dispose of tins in hazardous waste deposits.

Be careful when draining hot oil, danger of burns.

Make sure oil is of specified quality. Storage is in approved cans only.

Dispose of oil, greases, and filters seperately and properly.

Tyres and Tyre Air Pressure

When working on tyres, make sure tool carrier is parked properly and secured against rolling off.

Any repairs are to be carried out by trained mechanics only and with the appropriate tools.

Regularly check tyre air pressure. Excessive pressure may cause bursts.

Use appropriate tyre air pressure when mounting weights or implements.

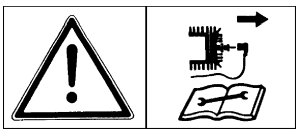
Re-tighten fastening screws of drive-wheels or check tightness when doing maintenance work.

Electrical System and Battery

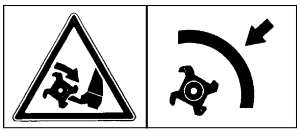
Persons having a pacemaker must not touch live parts of ignition system when the engine is running.

1

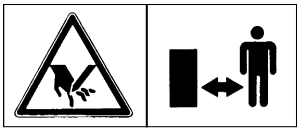
Explanation of Warning Signs



Before any cleaning, maintenance, and repair work switch off the engine and pull spark plug connector.

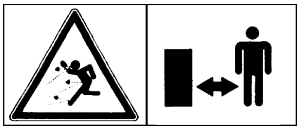


Do not work without protective covers mounted. Before starting the engine, bring covers in proper position.



With engine running, keep at a safe distance from cutting knife.

Do not touch moving machinery parts. Wait until they have come to a complete stop.



With engine running, keep at a safe distance from tool carrier.

Signs

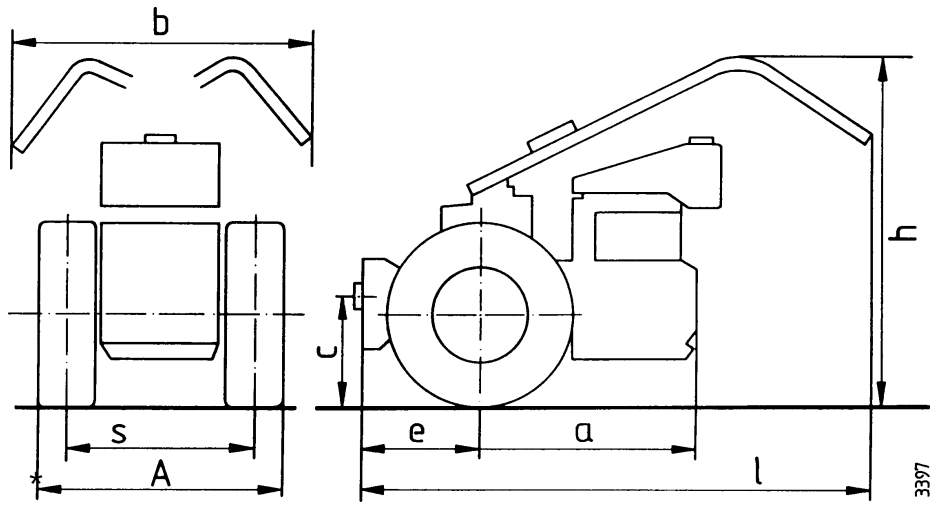
When working with the machine, wear individual protective ear plugs.

Wear protective gloves.

Wear solid shoes.

Tool Carrier

***Dimensions** :*



S + A = see track width plan

		(mm)						
		a	b	c	e	h		l
	5.00-10 AS	530	740	255	270	ca. 920		1270
	4.50-10 AS	530	740	255	270	ca. 920		1270
	20x8.00-10	530	740	255	270	ca. 920		1270
EH 25 D	21x11.00-8	530	740	260	270	ca. 930		1270
	5.00-10 AS	560	740	255	270	ca. 920		1270
	20x8.00-10	560	740	255	270	ca. 920		1270
EH 34 D	21x11.00-8	560	740	260	270	ca. 930		1270

Tyres: ..... 5.00 -10 field tyre

Optionally:

3490 511 ..... 20x 8.00 - 10 grass tyre

3490 611 ..... 21x11.00 - 8 terra-tyre

Drive-wheel attachment and application ..... see page 28 - 30.

Tyre air pressure at:
5.00-10 / 4.50-10 ..... 1,5 bar

21x11.00 - 8 ..... 0,8 bar
20x8.00 - 10 ..... 0,8 bar

3221 051 Pair wheel weight ..... 52 kg

2

Tool Carrier Grizzly compact

Type 5500 411, -412, -413, -414

Engine: *..... 4-stroke (petrol) EH 25D*

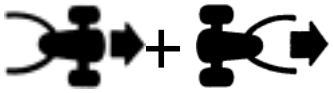
Gearbox: *..... Mechanical gearbox, 4 forward and 4 reverse speeds lockable differential, Safety hillholder*

Transmission oil

filling quantity: ..... approx. 2,0 Ltr.

Transmission oil SAE 90 - API - GL5 (e.g. BP Energear Hypo)

Travel Speeds *(km/h):*

				
	1.	***2.***	***3.***	***4.***
5.00-10 AS	*2,3*	*3,5*	*4,5*	*7,1*
4.50-10 AS	*2,3*	*3,5*	*4,5*	*7,1*
20x8.00-10 R	*2,3*	*3,5*	*4,5*	*7,1*
21x11.00-8 TG	*2,4*	*3,7*	*4,7*	*7,4*

PTO: *..... 825 rpm gear independent at engine speed 3600 rpm direction of rotation: clockwise, looking on PTO constant in forward and reverse*

Steering handle: *... rubber-supported, ... height adjustable, side adjustable without tools*

Vibration acceleration value:

on handlebar grip:

Double knife mowing drive $a_{hw} = 5{,}3\ m/s^2$

in accordance with EN 12733

Weights:

Empty weight (with fuel tank filled up):

	without drive-wheels	*5.00-10*
EH 25 D	*94,5 kg*	*110kg*

Tool Carrier Grizzly comfort

Type 5500 421, -422

Engine: *..... 4-stroke (petrol) EH 34D*

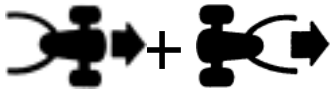
Gearbox: *..... Mechanical gearbox, 4 forward and 4 reverse speeds lockable differential, Safety hillholder*

Transmission oil

filling quantity: ..... approx. 2,0 Ltr.

Transmission oil SAE 90 - API - GL5 (e.g. BP Energear Hypo)

Travel Speeds*(km/h):*

				
	1.	***2.***	***3.***	***4.***
5.00-10 AS	*1,0*	*1,9*	*3,25*	*7,1*
4.50-10 AS	*1,0*	*1,9*	*3,25*	*7,1*
20x8.00-10 R	*1,0*	*1,9*	*3,25*	*7,1*
21x11.00-8 TG	*1,05*	*2,0*	*3,4*	*7,4*

PTO: *..... 825 rpm gear independent at engine speed 3600 rpm direction of rotation: clockwise, looking on PTO constant in forward and reverse*

Steering handle: *... rubber-supported, ... height adjustable, side adjustable without tools*

Vibration acceleration value:

on handlebar grip:

Double knife mowing drive $a_{hw} = 6{,}1\ m/s^2$

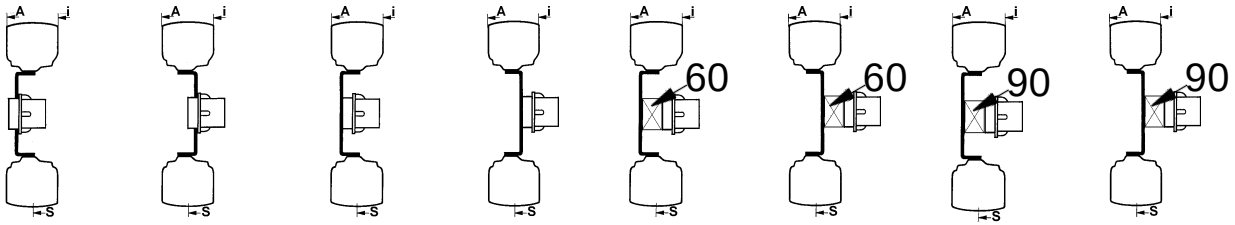
in accordance with EN 12733

Weights:

Empty weight (with fuel tank filled up):

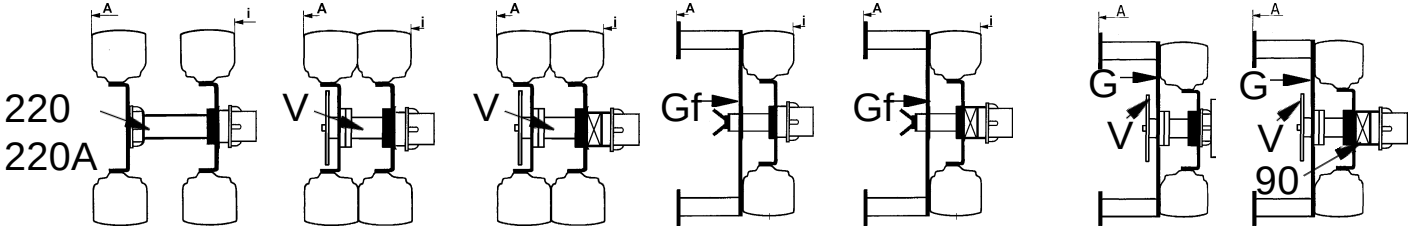
	without drive-wheels	*5.00-10*
EH 34 D	*105,5 kg*	*123 kg*

Wheel combination and Track Widths Table 5500 Grizzly compact, comfort



(mm)

B														60			60			90			90		
		A	S	i	A	S	i	A	S	i	A	S	i	A	S	i	A	S	i	A	S	i	A	S	i
1	4.00-8 AS				570	470	370	550	450	350	660	560	460	670	570	470	780	680	580	730	630	530	840	740	640
2	16x6.50-8 AS				700	530	360				790	620	450	690	520	350	910	740	570	750	580	410	970	800	630
3	21x11.00-8 Terra													860	585	310	930	655	380	920	645	370	990	715	440
4	4.50-10 AS				610	490	370	550	430	310	700	580	460	670	550	430	820	700	580	730	610	490	880	760	640
5	5.00-10 AS				620	490	360	560	430	300	710	580	450	680	550	420	830	700	570	740	610	480	890	760	630
6	20x8.00-10 R				650	460	270	650	460	270	740	550	360	770	580	390	860	670	480	830	640	450	920	730	540
7	5.00-12 AS				660	505	350				750	595	440	690	535	380	870	715	560	750	595	440	930	775	620
8	23x8.50-12 AS				740	525	310				830	615	400	730	515	300	950	735	520	790	575	360	1010	795	580
	23x10.50-12 AS													860	585	310	860	585	310	920	645	370	1000	725	450



(mm)

B		220	220 +B1	220 +B7		V	V +B7		V +60			Gf			Gf +90 +S			V +G			V +90 +G		
		A	A	A	i	A	A	i	A		i	A	i	"	A	i	"	A	i	"	A	i	"
1	4.00-8 AS	1110			460							1090	460	8									
2	16x6.50-8 AS	1240	1130		450																		
3	21x11.00-8 Terra								1540		440				1444	440	10				1444	440	10
4	4.50-10 AS	1150			460	940		460				1154	460	10				1154	460	10			
5	5.00-10 AS	1160			450	930		450				1164	450	10				1610	450	10			
6	20x8.00-10 R	1190			360	1120		360										770	360	10			
7	5.00-12 AS	1200			440	1060		440										1204	440	12			
8	23x8.50-12 AS	1280		1200	400	1260	1140	400										1284	400	12			
9	23x10.50-12 AS			1200	270	1370	1130	270															

30 = 2519 011
60 = 5516 021
90 = 5519 031
220 = 5616 511
220A = 5519 011
V = 5916 511
S = 762 32
Gf (10“) = 5517 531
Gf (12“) = 5917 541
G (10“) = 5917 011
G (12“) = 5917 021

Carrier Tool Grizzly premium

Type 5500 341

Engine: ..... 4-stroke (petrol) EH 34 D

Typ 5500 342

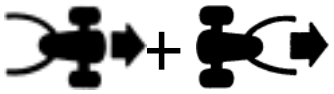
Engine: ..... 4-stroke (petrol) EH 25 D

Gearbox: ..... Mechanical gearbox,
4 forward and 4 reverse speeds
Steering brake clutch
Brake central

Transmission oil
filling quantity: ..... approx. 2,0 Ltr.

Transmission oil SAE 90 - API - GL5
(e.g. BP Energear Hypo)

Travel Speeds (km/h):

				
	1.	**2.**	**3.**	**4.**
5.00-10 AS	1,0	1,9	3,25	7,1
4.50-10 AS	1,0	1,9	3,25	7,1
20x8.00-10 R	1,0	1,9	3,25	7,1
21x11.00-8 TG	1,05	2,0	3,4	7,4

PTO: ..... 825 rpm
gear independent
at engine speed 3600 rpm
direction of rotation:
clockwise, looking on PTO
constant in forward and reverse

Steering handle:

Anti-vibration steering handle bearing (2-axle-steering handle bearing) - Licenser is Frauenhofer Gesellschaft zur Förderung der angewandten Forschung e.V. (German society for the promotion of applied research).
..... height-adjustable,
side adjustable without tools

Vibration acceleration value:

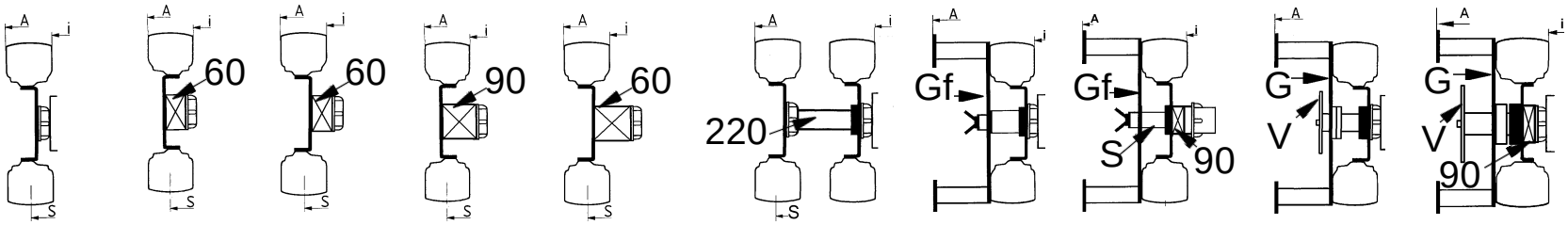
on handlebar grip:
Double knife mowing drive a_{hw} = 6,1 m/s^2
in accordance with EN 12733

Weights:

Empty weight (with fuel tank filled up):

	without drive-wheels	5.00-10
EH 34 D	131,5 kg	149 kg
EH 25 D	129,5 kg	147 kg

Wheel combination and Track Widths Table 5500 Grizzly premium



(mm)

B					60			60			90			90			220	220 + B1	220 +B5		Gf			Gf +90 +S			
		A	S	i	A	S	i	A	S	i	A	S	i	A	S	i	A	A	A	i	A	i	"	A	i	"	A
1	4.00-8 AS	630	530	430	640	540	440	750	650	550	700	600	500	810	710	610	1070			430	1090	430	8				
2	16x6.50-8 AS	760	590	420				880	710	540	720	550	380	940	770	600	1200	1080		420	1220	420	8				
3	21x11.00-8 Terra													960	685	410								1884	410	10	
4	4.50-10 AS	670	550	430	640	520	400	790	670	550	700	580	460	850	730	610	1110			430	1154	430	10				1154
5	5.00-10 AS	680	550	420	650	520	390	800	670	540	710	580	450	860	730	600	1120			420	1164	420	10				1164
6	20x8.00-10 R							830	640	450	800	610	420	890	700	510											1194
7	5.00-12 AS	720	565	410				840	685	530	720	565	410	900	745	590	1160			410							1204
8	23x8.50-12 AS	800	585	370				920	705	490				980	765	550	1240		1170	370							1284

30 = 2519 011
60 = 5516 021
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S = 762 32
Gf (10“) = 5517 531
Gf (12“) = 5917 541
G (10“) = 5917 011
G (12“) = 5917 021

Petrol Engine EH 25D

Manufacturer: ..... Robin

Type: ..... EH 25D

Version: ..... Fan-cooled 1-cylinder-4-stroke engine (petrol)

Bore: ..... 75 mm

Stroke: ..... 57 mm

Cubic capacity: ..... 251 ccm

Output: ..... 5.9 kW (8 DIN-hp) at 3600 rpm

Max torque: ..... 16.7 Nm at 2400 rpm

Spark plug: ..... BOSCH WR7AC
NGK BR6HS
Space between electrodes 0.7 - 0.8 mm

Ingnition system: ..... Contactless electronic magnet ignition, ignition point is pre-set, radio remote screened according to VDE 0879

Valve lash (engine cold)
Intake: ..... 0.08 - 0.11 mm
Outlet: ..... 0.08 - 0.11 mm

Starter: ..... Recoil starter

Fuel: ..... Commercial petrol min. octane number 85 RON (refer to fuel recommendations)

Fuel tank capacity: ..... approx. 5 l

Air filter: ..... Dry filter element with foamed preliminary filter

Carburetor: ..... Horizontal float carburetor

Mixture control screw: .... Basic setting 1/4 revs. open

Rated speed: ..... 3600 rpm

Top no-load speed: ..... 4000 rpm

Idling speed: ..... 1200 rpm

Engine oil:

Filling quantity ..... approx. 0.65 l
Multi-grade oil

at ambient temperature -15° to +45°C:
SAE 10W-40 API-SC (or higher)

at ambient temperature -25° to +15°C:
SAE 5W-20 API-SC (or higher)

Clutch:

5500411, -412 ..... conical dry clutch
5500413, -414 ... single disc dry clutch

Noise level:

with double knife mowing drive125 cm

In accordance with EN 12733 appendix B:

Noise level
at operator's ear: ..... L_P = 88 dB(A)

In accordance with 2000/14/EG, appendix III, part B, chapter 32 lawn mower:
Acoustic power level: L_W = 100,2 dB(A)

Operability on Slopes:

Engine is suited for use on slopes (with oil level at "max" = upper level mark)

Continuous operation possible:
up to 45° inclination (100%)

Petrol Engine EH 34D

***Manufacturer**: ..... Robin*

***Type**: ..... EH 34D*

***Version**: ..... Fan-cooled 1-cylinder-4-stroke engine (petrol)*

***Bore**: ..... 84 mm*

***Stroke**: ..... 61 mm*

***Cubic capacity:** ..... 338 ccm*

***Output**: ..... 8.1 kW (11 DIN-hp) at 3600 rpm*

***Max torque:** ..... 24.1 Nm at 2500 rpm*

***Spark plug:** ..... Bosch WR7CC NGK BR6ES, Champion RN4 Space between electrodes 0.6–0.7 mm*

***Ingnition system:** ..... Contactless electronic magnet ignition, ignition point is pre-set, radio remote screened according to VDE 0879*

***Valve lash** (engine cold)*
Intake: ..... 0.10 mm
Outlet: ..... 0.10 mm

***Starter**: ..... Recoil starter*

***Fuel**: ..... Commercial petrol min. octane number 90 RON (refer to fuel recommendations)*

Fuel tank capacity:

Vers. Grizzly Comfort ..... approx. 6 l

Vers. Grizzly Premium ..... approx. 8 l

***Air filter:** ..... Dry filter element with foamed preliminary filter*

***Carburetor**: ..... Horizontal float carburetor*
Main jet: 97,5
Idle jet: 40

***Mixture control screw:** .... Basic setting 7/8 revs. open*

***Rated speed:** ..... 3600 rpm*

***Top no-load speed:** ..... 4000 rpm*

***Idling speed:** ..... 1400 rpm*

Engine oil:

Filling quantity ..... approx. 1.2 l Multi-grade oil

at ambient temperature -15° to +45°C: SAE 10W-40 API-SC (or higher)
at ambient temperature -25° to +15°C: SAE 5W-20 API-SC (or higher)

***Clutch:** ..... conical dry clutch*

Noise level:

with double knife mowing drive125 cm

In accordance with EN 12733 appendix B:

Noise level
at operator's ear: ..... L_P = 91 dB(A)

In accordance with 2000/14/EG, appendix III, part B, chapter 32 lawn mower: Acoustic power level: L_W = 103 dB(A)

Operability on Slopes:

Engine is suited for use on slopes (with oil level at "max" = upper level mark)

Continuous operation possible: up to 45° inclination (100%)

The tool carrier agria 5500 Grizzly is a base power machine and is always operated with an implement mounted. Therefore, the machine is suited for all common applications in farming and forestry, as well as for winter service.

The following attachments are available:

- *Mowing attachments*
- *Sweeping attachments*
- *Snow dozers and snow casters*
- *Gravel and salt spreaders*

3

Engine

The four-stroke petrol engine runs on commercial petrol (refer to "Fuel Recommendations", p6).

Ignition System

The engine is equipped with a maintenance-free, contactless electronic ignition system. We recommend to have necessary check-ups done by an expert only.

During the first 20 operating hours (break-in period) do not use engine to maximum power.

***Even after break-in period** never use engine at higher speed than necessary for the work in hand.*

ⓘ ***High engine speed is harmful to any engine and considerably affects its durability. This applies especially for no load operation. Any overspeed (have the engine roar) can result in immediate damage.***

Cooling System

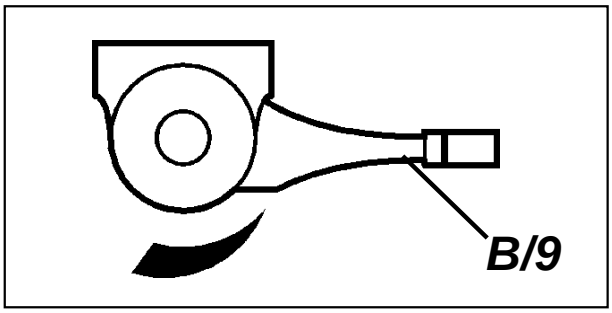
Cooling system is fan-cooled. Therefore keep screen at recoil starter and cooling ribs of cylinder clean and free from sucked-in plant trash.

Idling-speed

Always ensure that idling-speed is adjusted correcty. At low speeds and with the speed control lever set to idle, the engine is supposed to run smoothly and without run-out.

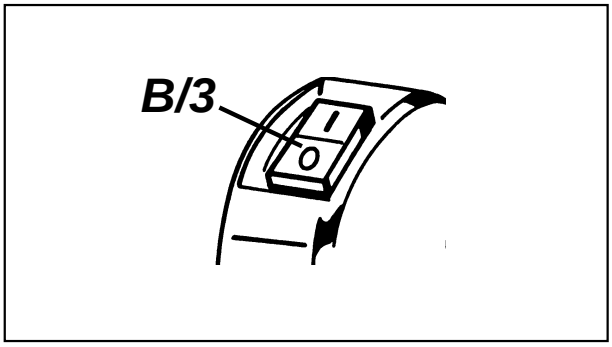
Air Filter

The air filter purifies the air intake. A clogged filter reduces engine output.



Speed Control Lever

The speed control lever (B/12) on the steering handle is for stepless setting of engine speed from min. = idle to max. = full throttle.

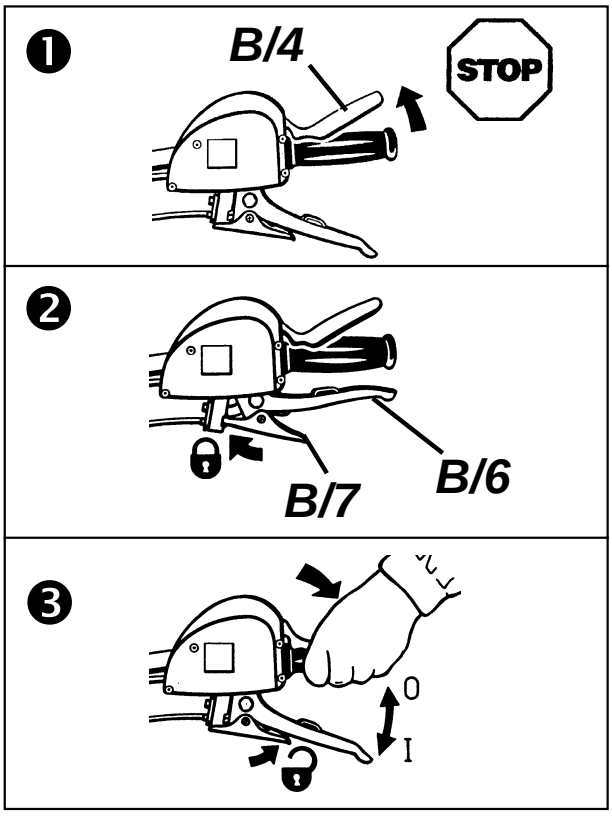


Engine-off-Switch

The tool carrier is equipped with an electric off-switch (B/1). This switch is for switching off the ignition system (engine is off).

"I" = operating position
"0" = engine-off position

ⓘ *The engine-off-switch also serves as **emergency off-switch**. To turn engine off quickly, bring switch into position "0".*



Safety Circuit

❶ ***Stop position:*** *Upon release of safety shifting lever (B/4), the ignition system is switched off (engine is off). Caution – engine continues running due to centrifugal mass.*

❷ ***Start position:*** *For starting the engine and for short breaks, press the safety shifting lever, pull the hand clutch lever (B/6) and lock with pawl (B/7).*

❸ ***Operating position:*** *To operate, press safety lever (B/4).*

⚠ ***Do not fasten safety lever.***

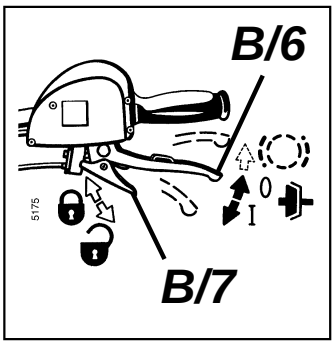
ⓘ *The safety lever also serves **to switch off in an emergency**. In an emergency release the safety lever for fast engine switch-off. The lever automatically goes to STOP position.*

Clutch/Safety hillholder

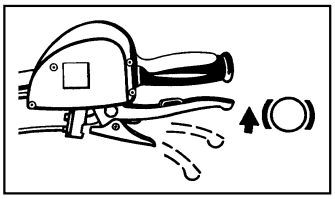
Grizzly compact, comfort

The safety hillholder serves to stop on slopes or during shifting.

The clutch and the safety hillholder are operated via the hand lever (B/6).



- *The machine is decoupled when you pull the hand clutch lever to position “0”. Now, the engine stops driving the tool carrier.*
- *The pulled hand clutch lever can be locked with pawl (B/7).*

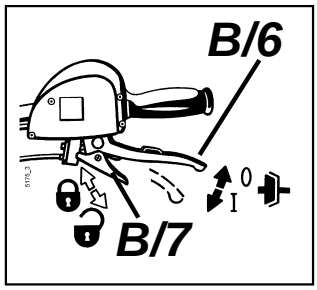


- *The safety hillholder is operated by further pulling the hand lever upwards.*

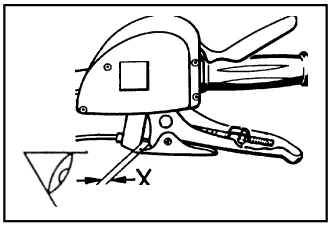
Clutch

Grizzly premium

The machine is equipped with a single plate dry clutch. Operation is via the hand clutch lever (B/6).

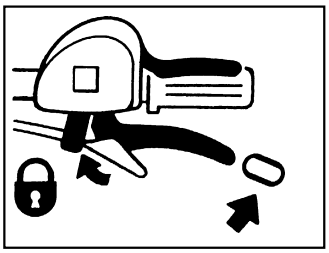


The machine is decoupled when you pull the hand clutch lever to position “0”. Now, the engine stops driving the tool carrier.



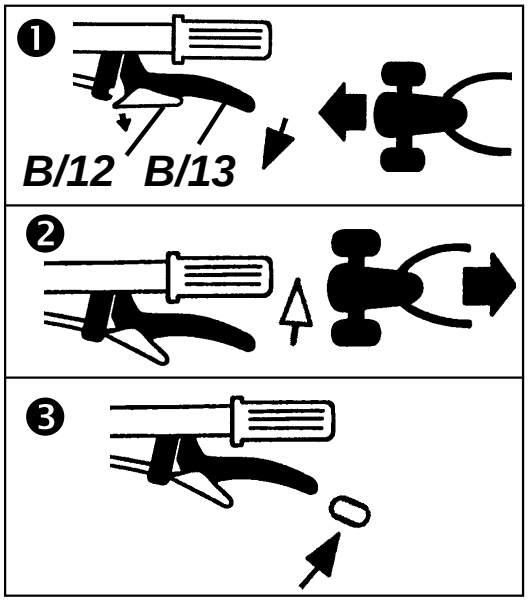
- *To avoid clutch slipping away during operation, a clutch play is factory-set on the hand lever.*

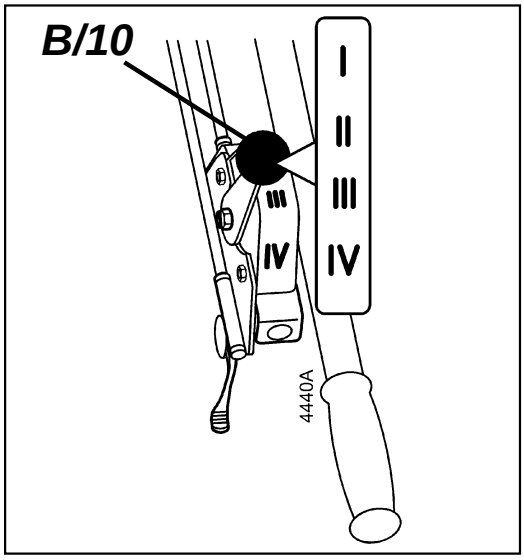
➡ 47

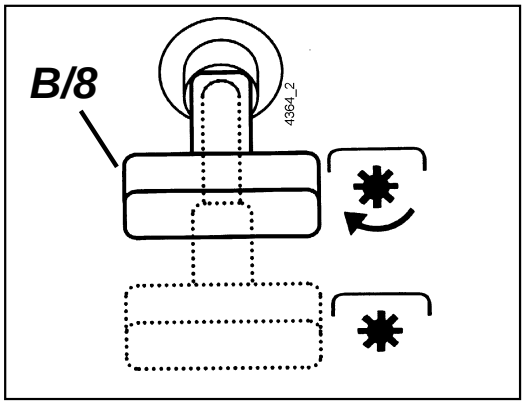


*Do not park the machine with the clutch pulled and the **engine running**. This may damage the clutch release bearing.*

*Ensure the lever is pulled (pawl is locked in place) when you park the machine with the **engine stopped**, otherwise clutch problems may result due to corrosion.*







Gearbox

The machine is equipped with a 4-gear reversing transmission giving you 4 gears for forward speed and 4 gears for reverse.

ⓘ ***Only shift gears when the engine is halted (decoupled)!***

F-R Change

F/R drive is possible in all 4 gears.

❶ *Move hand lever (B/13) downwards (pawl B/12 is not locked) = the tool carrier travels forward.*

❷ *Hand lever pulled = the machine travels reverse.*

❸ *Centre position (pawl engaged) = the machine is in neutral.*

ⓘ ***In F/R neutral, the machine can be pushed.***

Gear Shifting

The gears 1 – 2 – 3 – 4 are engaged with the shifting lever (B/10).

*There is **no** neutral position between these gears.*

ⓘ *In general, you can only drive the tool carrier, if F-R-change is either in forward or reverse, no matter whether gear is enganged or not.*

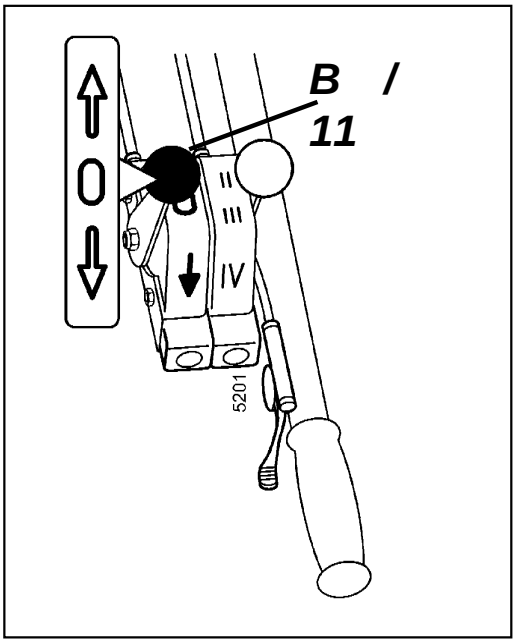
PTO Shifting

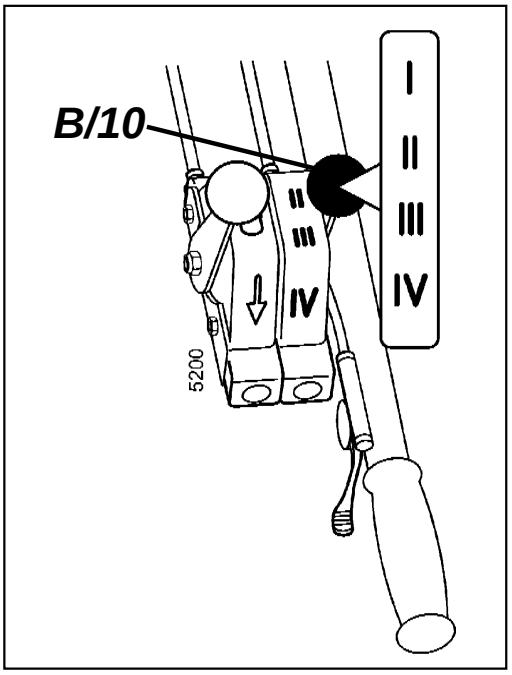
The gear-independent PTO (A/10) cannot be disconnected from the tool carrier (will always rotate with running engine). The PTO shifting mechanism is arranged at the PTO-shaft driven attachments.

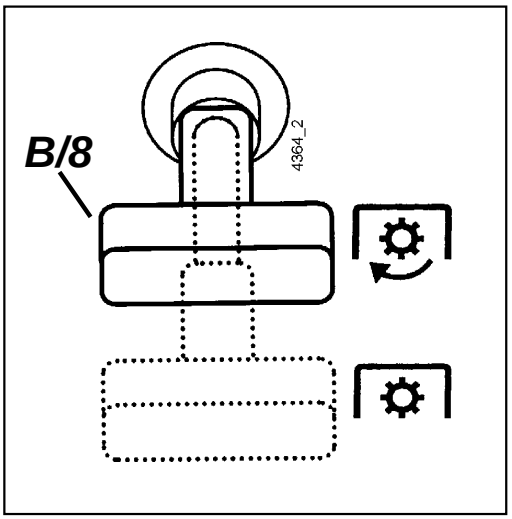
The PTO shifting mechanism (B/8), however, is arranged at the tool carrier and is connected upon mounting of the attachment by the ball cup (A/9).

PTO-shaft drive is connected

PTO-shaft drive is disconnected







Gearbox

The machine is equipped with a 4-gear reversing transmission giving you 4 gears for forward speed and 4 gears for reverse.

Only shift gears when the engine is halted (decoupled)!

F-R Change

Move hand lever (B/11) forward
= the tool carrier travels forward.

Move hand lever backward
= the machine travels reverse.

Centre position
= the machine is in neutral.

In F/R neutral, the machine can be pushed.

Gear Shifting

The gears 1 – 2 – 3 – 4 are engaged with the shifting lever (B/10).

*There is **no** neutral position between these gears.*

In general, you can only drive the tool carrier, if F-R-change is either in forward or reverse, no matter whether gear is enganged or not.

PTO Shifting

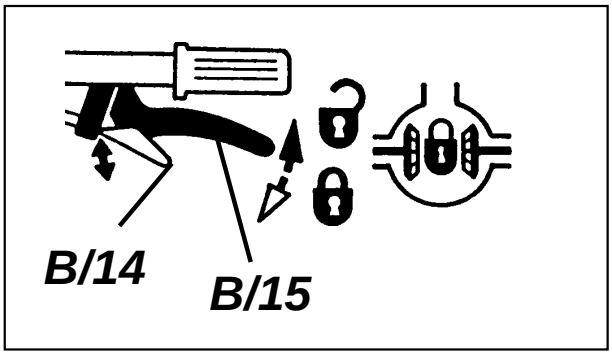
The gear-independent PTO (A/10) cannot be disconnected from the tool carrier (will always rotate with running engine). The PTO shifting mechanism is arranged at the PTO-shaft driven attachments.

The PTO shifting mechanism (B/8), however, is arranged at the tool carrier and is connected upon mounting of the attachment by the ball cup (A/9).

PTO-shaft drive is connected

PTO-shaft drive is disconnected

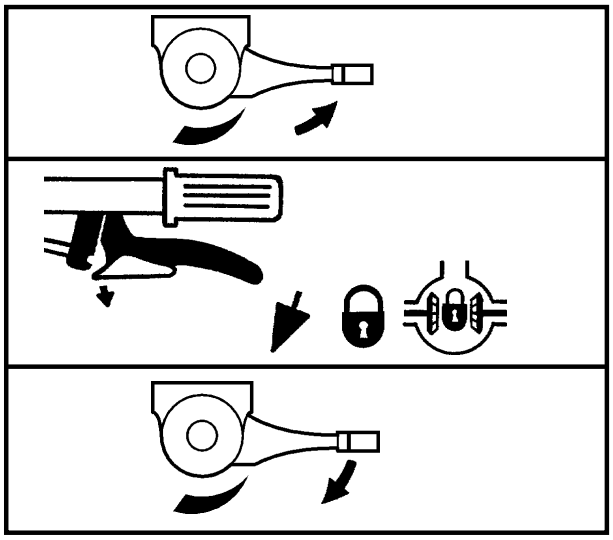
Differential Gear



Differential can be locked in severe conditions to improve traction. The lever for differential lock and unlock is on the right side of the handle bar. On the lever there is a pawl to lock the disengaged differential.

ⓘ ***Because of the tractor's easy steering, the differential should be unlocked when driving with the trailer mounted, especially in curves.***

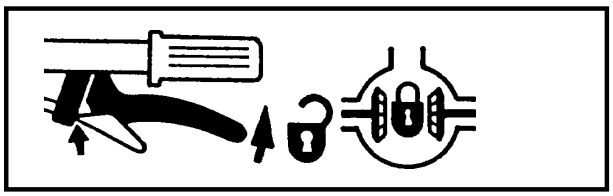
Keep differential locked only as long as necessary.



Engaging the Differential Lock:
(rigid wheel shaft)

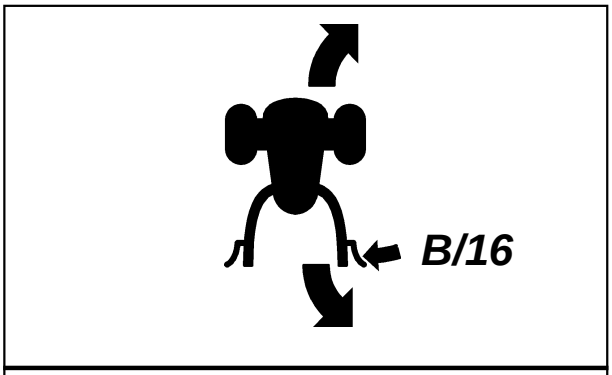
On the move:

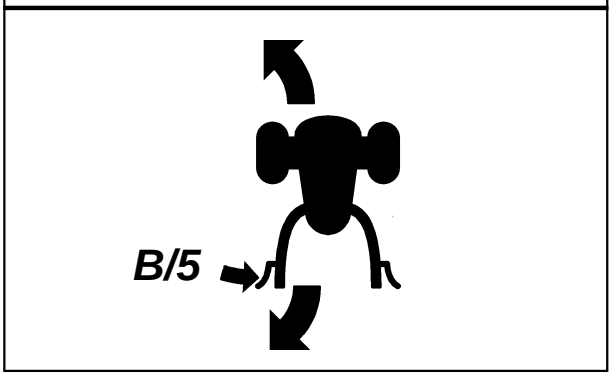
- *Release throttle.*
- *Pull lever for differential lock slightly (B/15).*
- *Unlock pawl (B/14).*
- *Slowly release lever while pressing the throttle.*



Disengaging the Differential Lock:

- *Pull lever for differential lock until pawl locks into place.*





Single-Wheel Steering Brake Clutch

For easy turning, the tool carrier is equipped with an easy-use steering brake clutch.

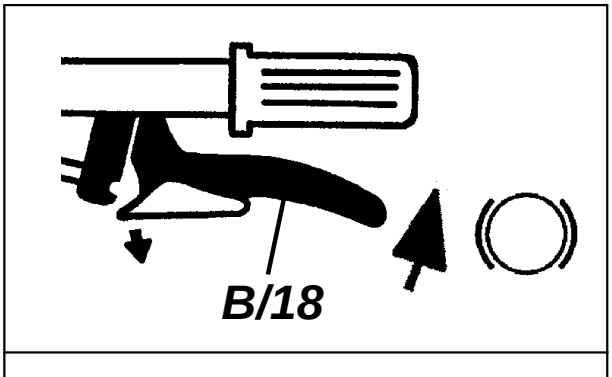
To turn right, pull hand lever (B/16) to decelerate the right drive-wheel. With forward speed engaged, the machine turns right.

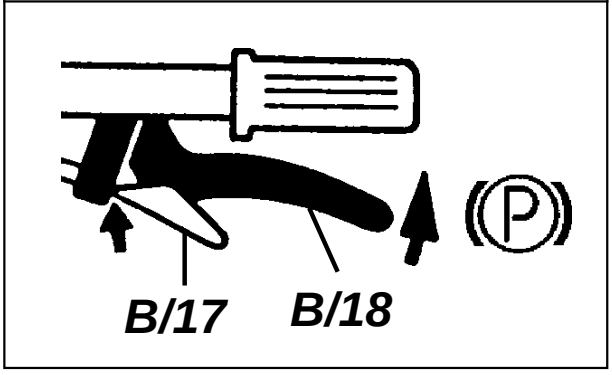
To turn left, pull hand lever (B/5).

⚠ ***When turning on banks, always turn the machine towards the slope.***

Central Brake

To slow down or park the machine on hilly ground, use the combined central hand brake.





- ***Central Brake***

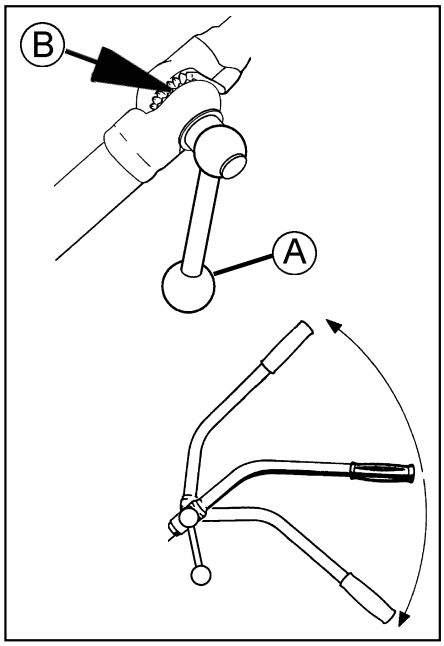
Pull hand lever (B/18) – brakes act on both drive-wheels.

Release hand lever and the lever swivels back to original position – brake is released.

- ***Hand Brake***

Pull hand lever (B/18) and lock with pawl (B/17) – both drive-wheels are blocked.

To release hand brake, unlock pawl (B/17) and release lever (B/18) – brake is released.

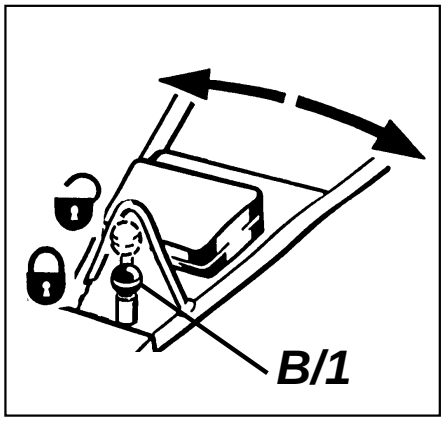


Steering Handle

⚠ *Do never adjust operating handles during working - risk of accidents!*

Steering Handle Height Adjustment

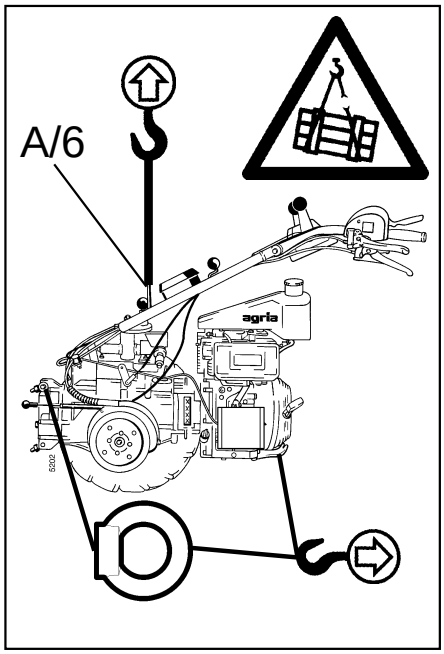
- *Unfix ball handle levers (A) on either side until the ratchets (B) are free.*
- *Bring left and right steering handle to the desired height and introduce into the respective ratchet.*
- *Tighten ball handle levers (A) again.*



Steering Handle Lateral Adjustment

From its normal position (centre position), the steering handle can be turned by about 30° to the left or right.

- *Pull ball handle (B/1) upwards and keep it in position; then turn steering handle to the left or right into the desired positon.*
- *Release ball handle and slightly move steering handle to the left and right until the fixing bolt is engaged.*



Eyelet for Loading

The hooked yoke (A/6) is meant for loading the machine and for suspending the retaining rope for works on slopes.

Do not use any loading devices with sharp edges (e.g. sharp-edged hooks, lugs etc.).

Never walk or remain under moving loads. Danger!

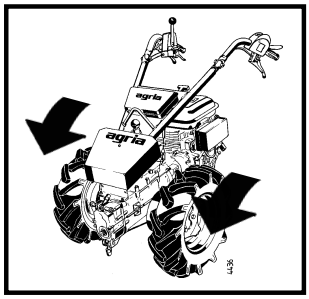
Fixing Points

For towing away, recovering and tying down and to ensure a safe transport, use the

fixing points

at the connection flange and engine food guard.

Drive-Wheels

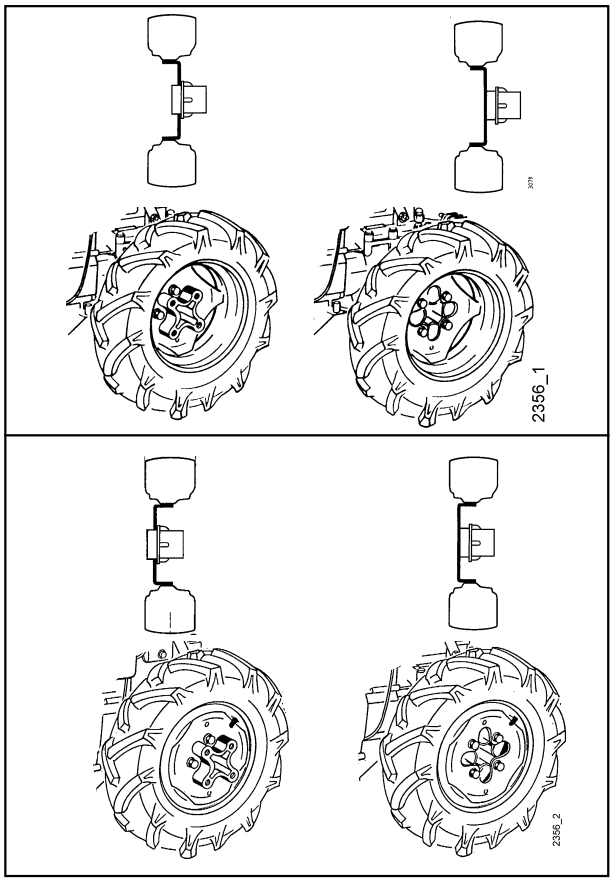


For full tractive power, mount wheels with pointed parts of lugs showing in travel direction (wheels seen from above). Fit the countersunk side of spring-lock washer into countersink-type holes of disk wheel (see fig. "Wheel Attachment Bolts").

The wheels can also be mounted either on their inner or outer sides for variable track widths (see track widths table, p17).

Grizzly compact, comfort

The drive-wheels are mounted onto the inner or outer part of the hub adapter, depending on their use.



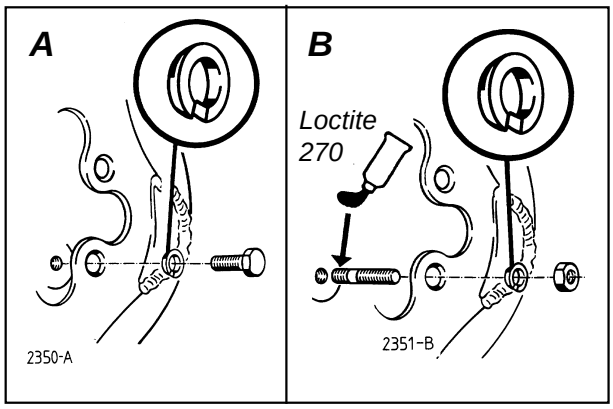
Wheel Attachment Bolts

*Version **A** wheel bolt with spring-lock washer.*

*Version **B** locking bolt with spring-lock washer and wheel nut.*

Screw short thread end of locking bolt tightly into hub, if possible, glue with LOCTITE 270 (or similar glue).

Fit countersunk side of spring-lock washer onto disk wheel.



*On a new machine or after wheel change, re-tighten wheel bolts and nuts after the first 2 operating hours with **100** Nm. Retighten bolts and nuts in each maintenance.*

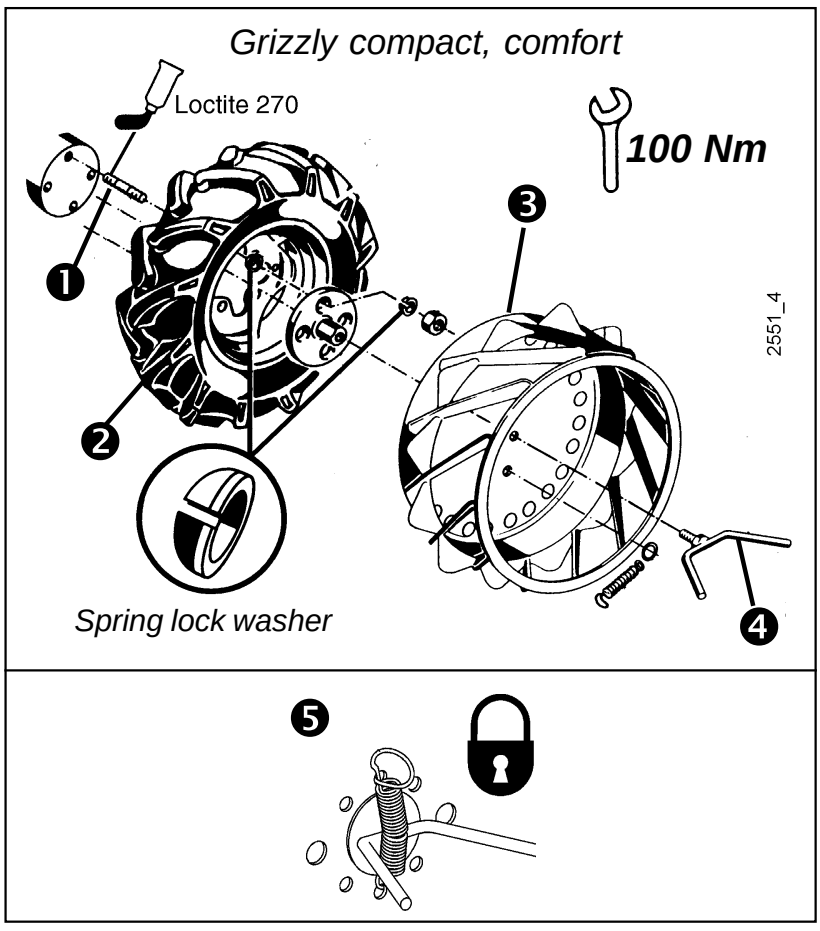
Snow Chains

When working with snow chains fitted on wheels, observe manufacturer's instructions, make sure there is sufficient clearance between chains and machine parts.

Drive-Wheel Use

	Tyre	Tread Profile	Use	Item No.
	5.00-10	field tyre		0190 111
	20x8.00-10	grass tyre	grass maintenance	3490 511
	21x11.00-8	Terra tyre	mowing on soft (boggy) ground	3490 611 + Intermediate flange 5519 031

ⓘ *For mowing **on extremely steep slopes**, we recommend using twin-wheels, wheel centres or strake wheels.*



Strake Wheels

Item 5517 521 for drive wheels 5.00-10

Order of mounting ❶ - ❺

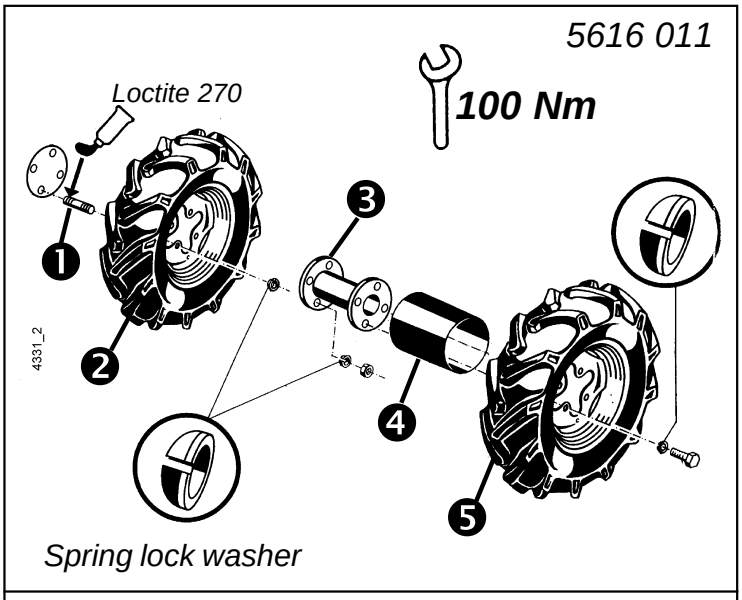
Please note:

❶ *Wheel attachment bolt version B must be fit.*

❷ *Fit spring-lock washers between wheel bowl and flanges (centring)*

❸ *Make sure that wheel carriers point to machine, when looked into travel direction (see fig.).*

❺ *Block the tommy screw by positioning the spring.*



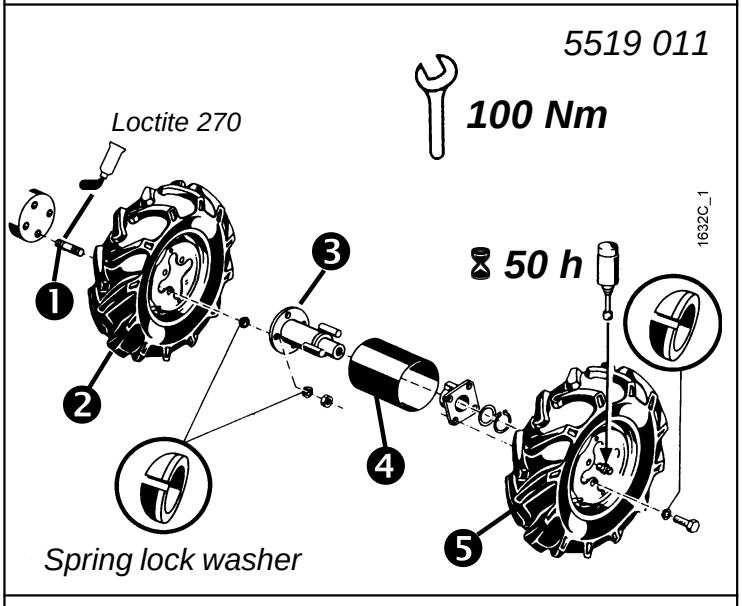
Track-Width Adjuster on Twin Wheels

Order of mounting ❶ - ❺

Please note:

❶ Using wheel attachment bolts version B.

❸ Fit the spring lock washers between the wheel bowl and track-width adjuster (centering).



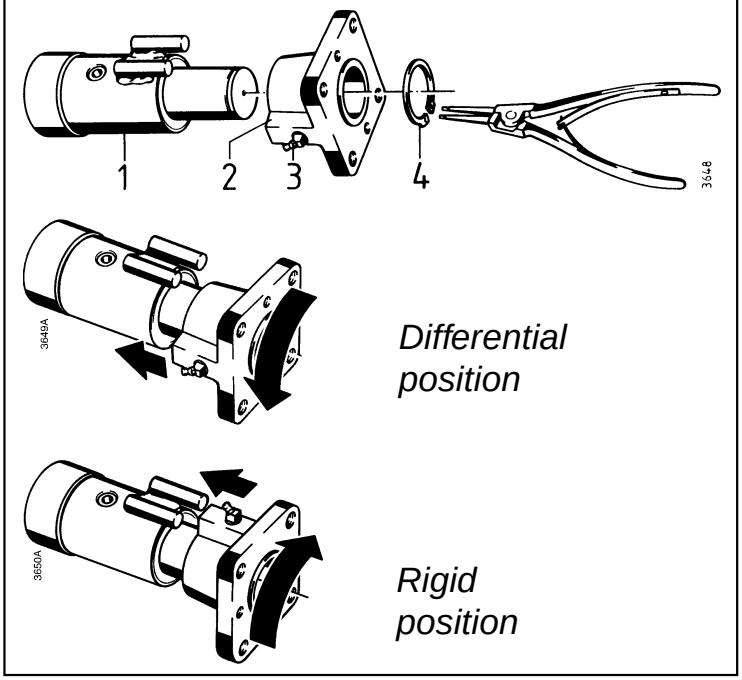
Differential Hubs on Twin Wheels

Order of mounting ❶ - ❺

Please note:

❶ Using wheel attachment bolts version B.

❸ Fit the spring lock washers between the wheel bowl and track-width adjuster (centering).



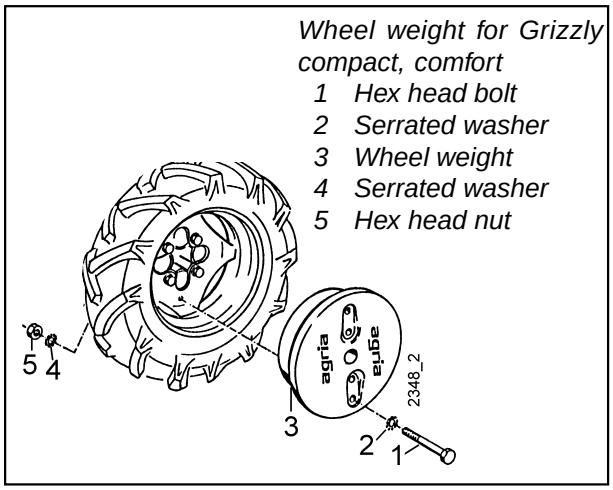
Lubrication

*Lubricate the wheel flange lube nipple at intervals of **100** operating hours or after cleaning with a pressure washer. Use a grease gun (Bio lubrication grease).*

Adjustment of the differential hub

The differential hubs are factory-set to differential effect, mounting of rigid position see fig.

Wheel Weights



Wheel weight for Grizzly compact, comfort

1 Hex head bolt
2 Serrated washer
3 Wheel weight
4 Serrated washer
5 Hex head nut

It is possible to attach wheel weights to improve traction.

Attaching Wheel Weights

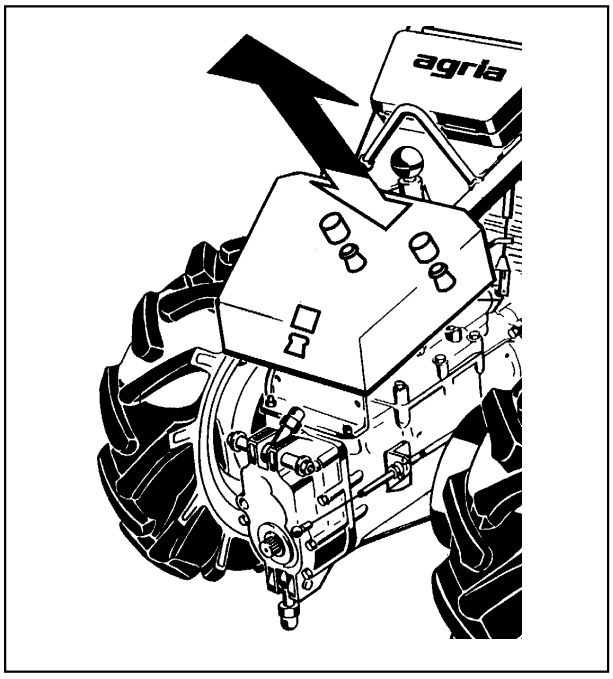
Item. No. 3221 011
for drive-wheels 5.00-10 AS; 4.50-50 AS

Grizzly compact, comfort

Attach the weights to the wheels with the hex head bolts, hex nuts and serrated washers.

Tighten the hex nuts well!

Hood



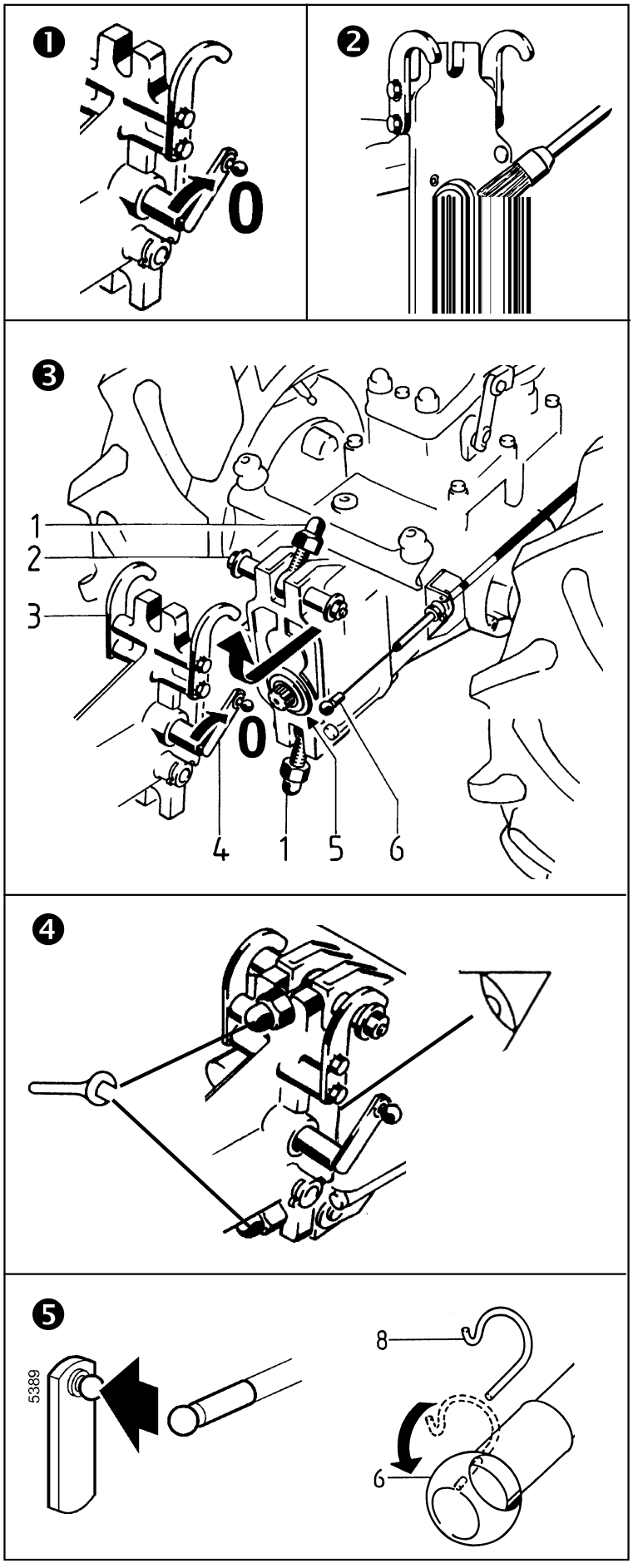
Remove Hood

- *Lift rear end of hood.*
- *Lift front end of hood and completely remove it.*

Placing Hood

- *Place front and rear of hood with the rubber cups onto the ball heads.*
- *By slightly applying pressure to the rear and front of the engine cowling, have the ball cups engage in the ball heads.*

To facilitate the installation, you may apply some bio-grease onto the rubber cups.



Coupling and Decoupling Implements

⚠ ***Mount and dismount attachments only with engine switched off!***

Coupling Attachments:

Ensure that coupling surfaces on tool carrier and attachment are clean. Clean, if necessary.

❶ *For PTO-driven attachment, move lever (4) on the attachment to position "0".*

❷ *Coupling sleeve should slightly be greased with Bio-lubrication grease.*

❸ *Slide pegs (2) of basic machine into hooks (3) of attachment.*

❹ *Fold both eye bolts (1) over coupling flange.*

Note:

- *Make sure flanges (5) are properly centred and flat fitted.*
- *Tighten cap nuts evenly.*

❺ *For PTO driven attachment, press link (6) onto shift lever (4) until it locks into place. Insert circlip and secure.*

*For **decoupling**, proceed in reverse order.*

Commissioning

Please note that durability and operational safety of the engine depend to a large extent on its breaking-in. Always allow a cold engine to warm up for some minutes and never run it at full throttle at the beginning.

*Please note: for the first **20** hours of operation (break-in period) do not use the engine at full power.*

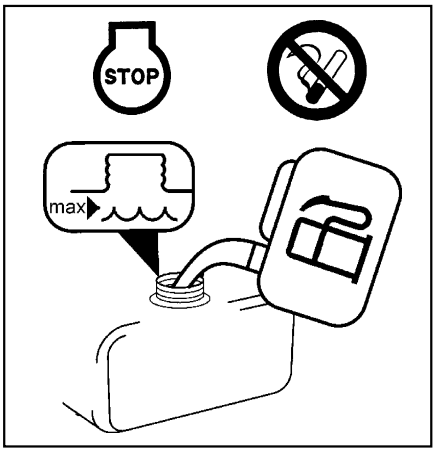
Make sure you check and maintain air filters regularly and use clean fuel. Only use branded petrol.

Only use fresh, clean fuel (not older than 3 months) and approved fuel cans to be purchased in special shops. Rusty sheet metal cans or fuel cans not suited for petrol are not permitted.

For the first commissioning or after longer periods of no operation, fill fuel tank to maximum to avoid starting problems.

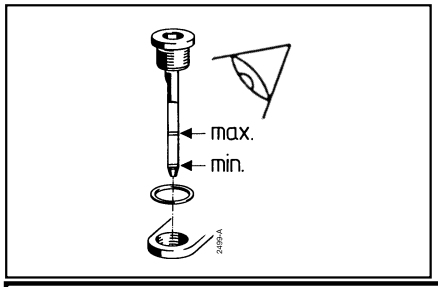
Be careful when dealing with fuel.

Fuel is easily inflammable and explosive in certain conditions!

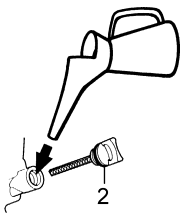


- ***Do not refill in closed rooms.***
- ***Before each fuel fill, shut off the engine and wait until it has cooled off.***
- ***Never refill close to open fire, inflammable sparks or hot engine parts.***
- ***Do not smoke during filling!***
- ***Do not spill any fuel, use a proper filling device.***

Do not cause fuel tank to overflow, but leave a 5 mm margin for the fuel to expand.

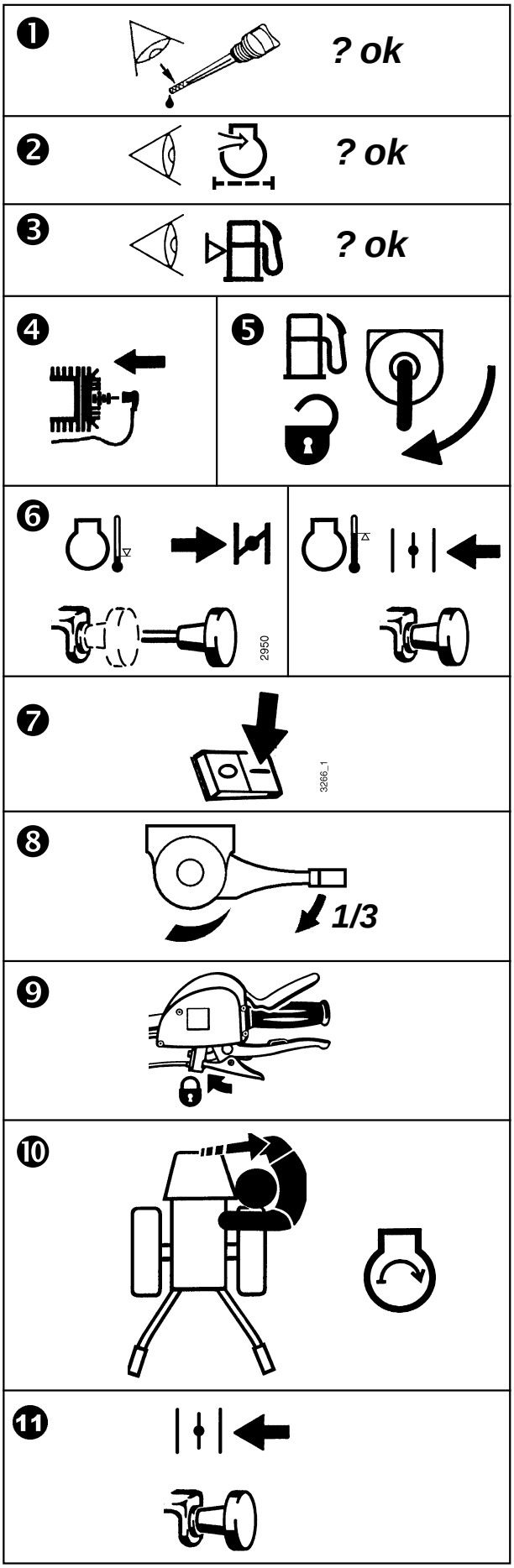


- ***Check transmission oil level*** *(see page 43)*



Note: *For reasons of transport, the engine is not filled completey with engine oil!*

Before you operate the engine the first time, fill in engine oil (see page 38)!



Starting Petrol Engine

⚠ ***Never start engine in closed rooms. Exhaust fumes contain carbon monoxide, which axts toxic when inhaled.***

❶ *Check the engine oil level*

❷ *Air filter clean?*

❸ *Sufficient fuel is filled into the tank?*

❹ *Mount spark plug connector*

❺ *Open both fuel taps (C/3 or D/3 + D/15).*

❻ *Choke*

- ***Cold engine:*** *pull CHOKE knob (C/5 or D/5).*
- ***Warm engine****: leave CHOKE knob in normal operating position or pull out half way.*

❼ *Set ON-OFF switch (B/3) to operating position.*

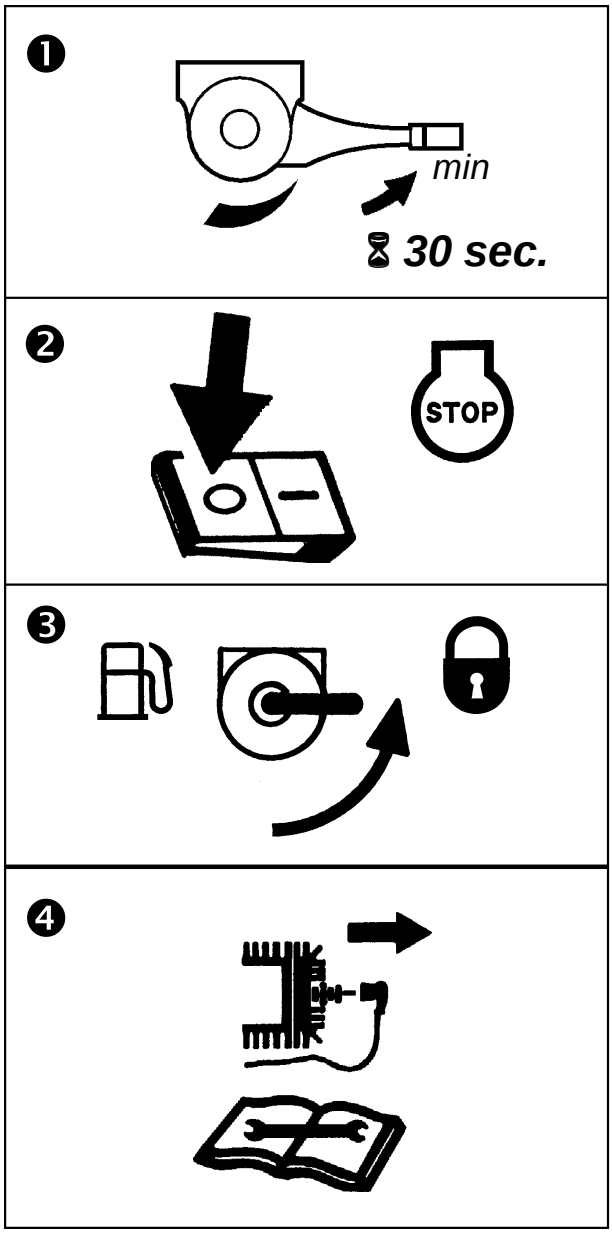
❽ *Set speed control lever (B/9) to 1/3 throttle.*

❾ *Pull hand clutch lever (B/4) and lock pawl (B/7).*

❿ *Pull starting-rope on handle (C/6or D/6) until you feel starter clutch engage. Then* ***pull hard and fast*** *to start the engine. After the start, carefully let rope glide back. Do not let snap.*

⓫ *Once the engine has started, let it warm up for some time. Slowly push choke back into operating position, if necessary.*

Turning off Petrol Engine



❶ *Set speed control lever to idle position and let engine run idle for approx. half a minute.*

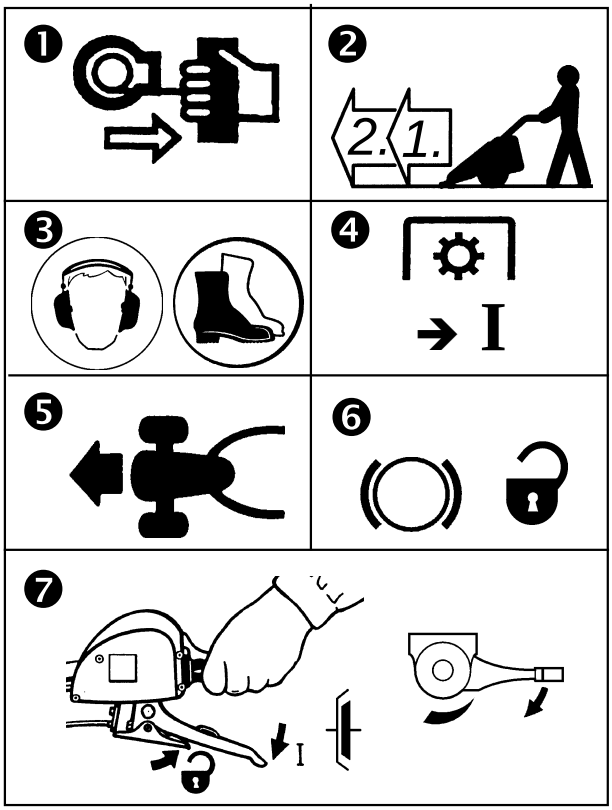
❷ *Set engine-off-switch to "0".*

❸ *Close both fuel taps (C/3 or D/3 + D/15).*

❹ *Secure tool carrier against unauthorized use – disconnect spark-plug connector.*

ⓘ *Engine-off-switch (B/1) also serves as* ***emergency off-switch****. If necessary, set switch to "0" to turn engine off.*

ⓘ *For parking the machine for longer periods of no operation, do not use engine-off-switch to turn off engine, but close fuel taps and let engine run until it slowly comes to a complete stop. This ensures carburetor to be empty and no resin residue to deposit.*



Operations

❶ *Start engine as described in "Starting the Engine".*

⚠ ***Check safety circuit function - only operate the machine if the safety circuit is working.***

❷ *Engage appropriate gear.*

❸ *Wear individual protective ear plugs and solid shoes.*

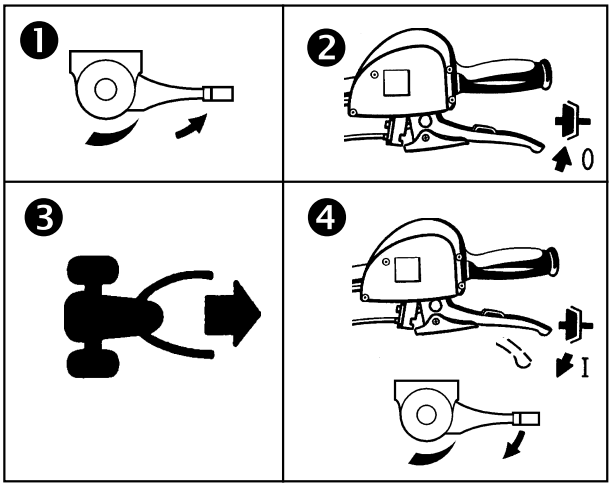
❹ *Switch on PTO.*

❺ *Move F/R drive to position forward.*

❻ *Release the brake.*

❼ *Slowly release the hand clutch lever while pressing the throttle.*

4



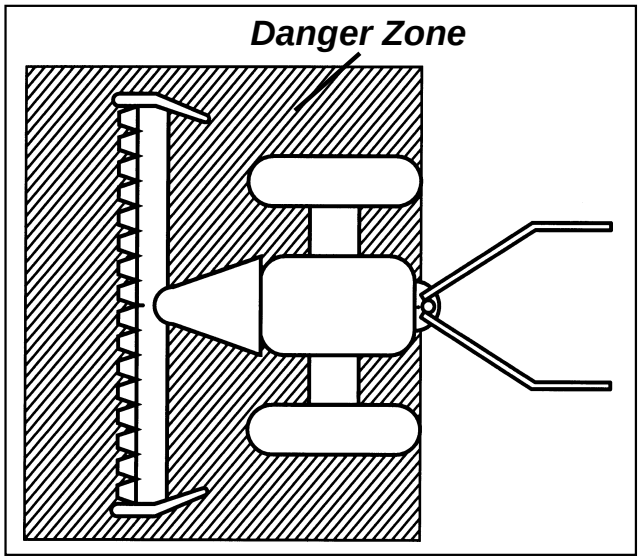
For direction change from forward to reverse, proceed as follows:

❶ *Set speed control lever to idling position.*

❷ *Pull hand clutch lever and hold.*

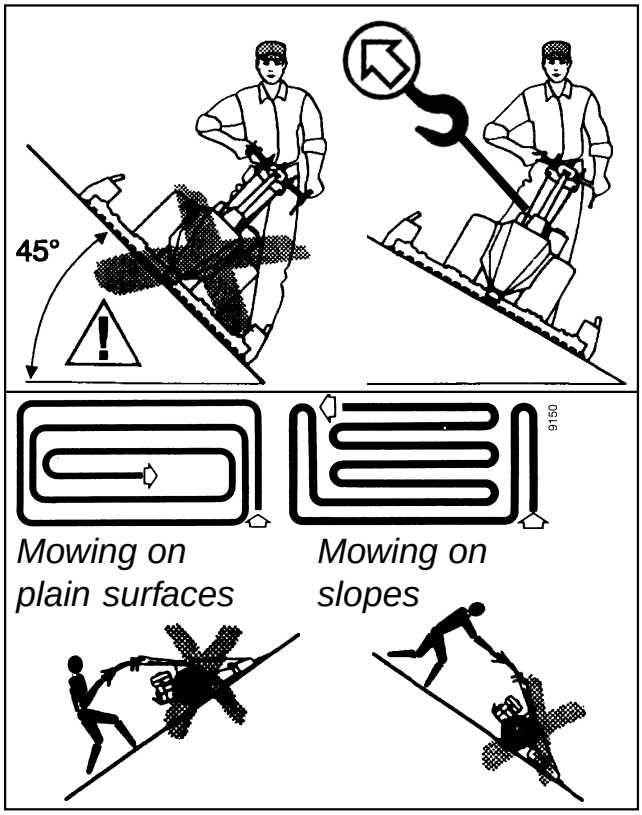
❸ *Move F/R drive to position reverse.*

❹ *Slowly release hand clutch lever while pressing the throttle.*



Danger Zone

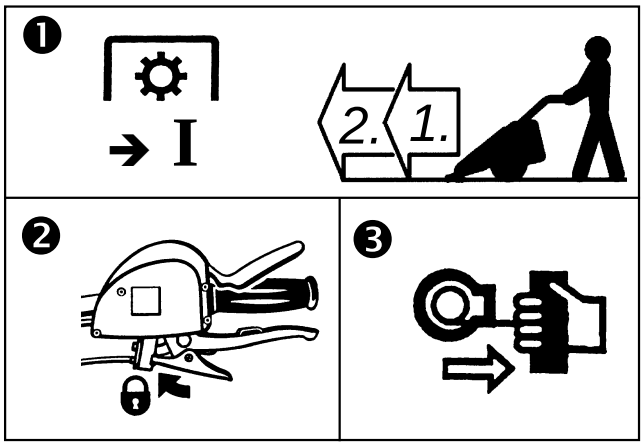
⚠ ***Keep out of the machine's danger zone during starts and operation.***



Mowing on Slopes

⚠ ***To prevent the tool carrier from sliding on slopes make sure it is secured by another person using a bar or a rope. This person must stay at a higher position than the vehicle and at a safe distance from the attachment at work.***

If possible, always work across the slope.



Starting the Engine on Slopes

❶ *Keep the mowing drive and travelling drive in engaged mode; braking effect.*

❷ *Move the hand clutch lever and safety shifting lever to "Start" position.*

❸ *Start engine.*

Apart from observing all operating instructions , it is also important to pay attention to the following maintenance instructions.

Please note:

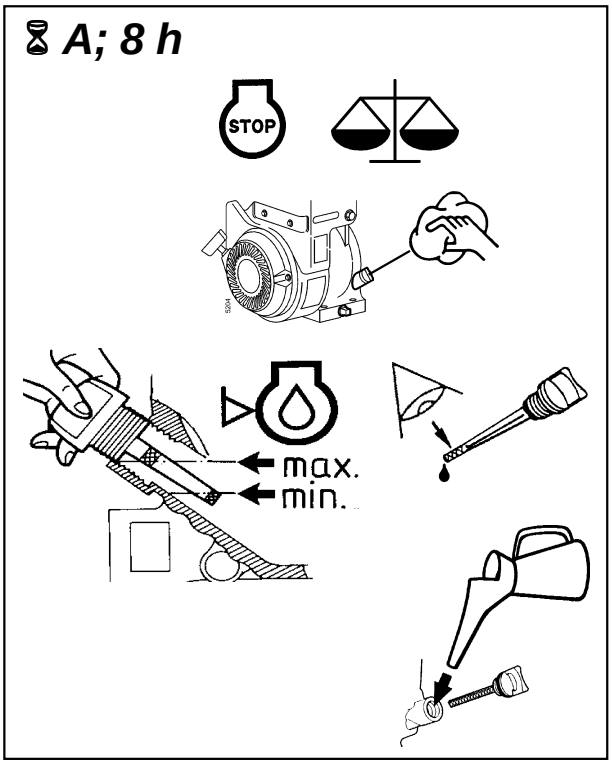
Only do all maintenance work with the engine switched off and spark plug connector disconnected!

When working on mowing knives, wear safety gloves!

Engine

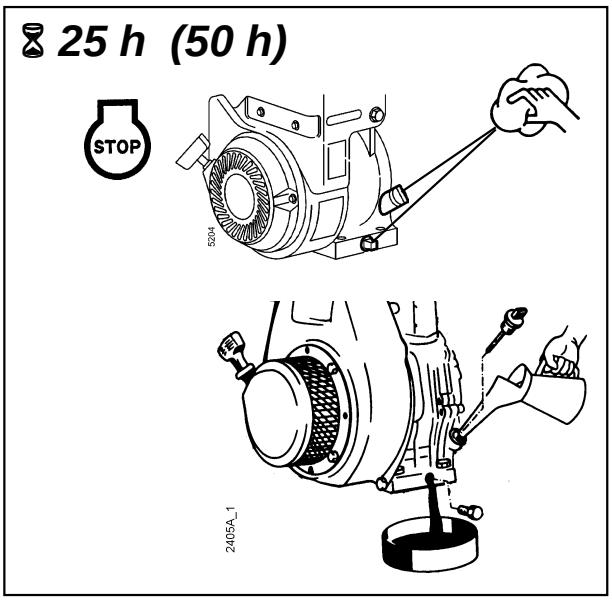
Check Oil Level

each time you take up operation and after every 8 operating hours,



- *only with engine switched off and in horizontal position.*
- *Clean oil plug and surrounding parts.*
- *Remove oil plug, clean dipstick with a clean cloth and dip back into oil tank (do not screw in), take out dipstick and read oil level.*
- *In case oil level is below lower mark "min", refill engine oil (refer to “Specifications”) until oil level reaches rim of oil filler neck "max".*

Changing Engine Oil

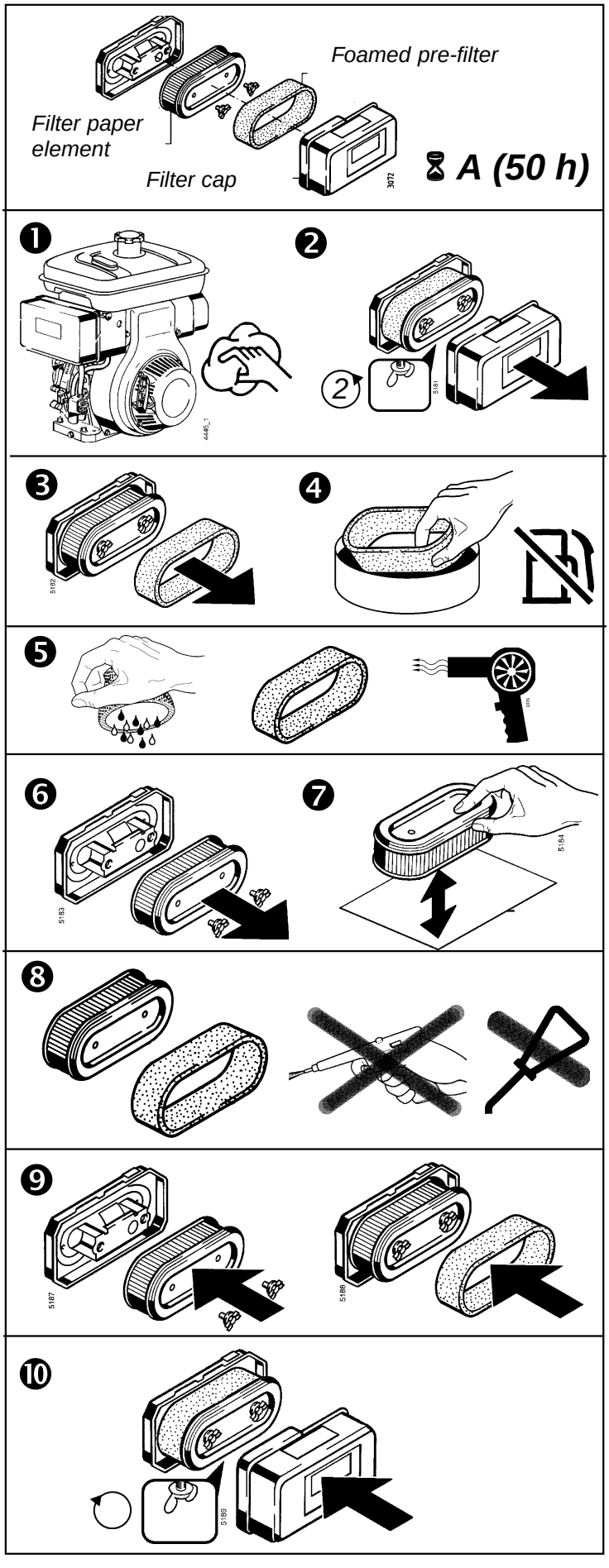


***The first oil change is after 25 operating hours**, Following oil changes are after every **50** operating hours. Change oil while engine is still warm, but not hot – danger of burns!*

- *Clean filling- and drain plug and surrounding parts.*
- *Change the oil and dispose of properly.*

Check sealing washer for good condition and exchange, if necessary!

- For engine oil quality refer to “Specifications”.



Dry Air Filter EH 25

When You take up operation check the air filter (E/4) on dirt, clean it if necessary.

*Clean the air filter at least every **50** operating hours or at **3-month** intervals, after some hours in very dusty conditions:*

❶ *Clean the air filter and surrounding parts.*

❷ *Loosen the wing nut and take off the filter cap.*

❸ *Carefully remove the foamed preliminary filter.*

❹ *Wash the foamed preliminary filter in warm lye (do not use petrol).*

❺ *Sqeeze the foamed preliminary filter like a sponge and dry it.*

❻ *Remove the filter element.*

❼ *Tap the filter element against a smooth surface.*

❽ *Do not clean the foamed preliminary filter and the filter element using compressed air and do not soak it in oil!*

❾ *Reinstall the filter element and the foamed preliminary filter.*

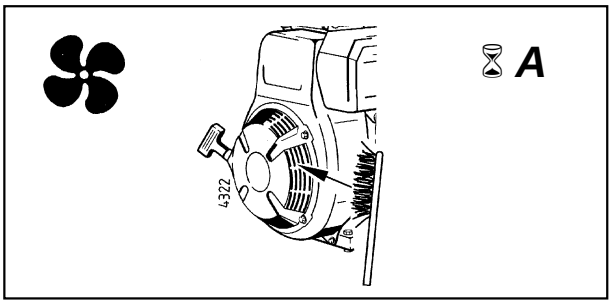
❿ *Reposition the filter cap and fasten the wing nut.*

● *Replace the filter element after **5 cleaning actions or approx. every 200** operating hours.*

ⓘ *Replace immediately damaged filter elements.*

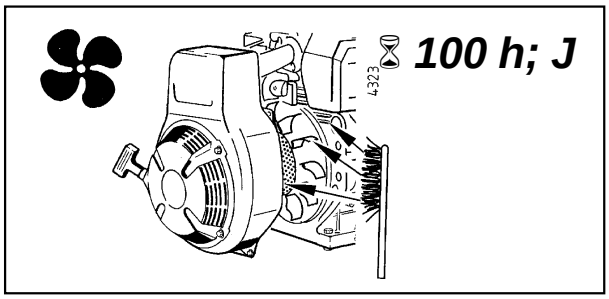
5

Cleaning the Cooling System



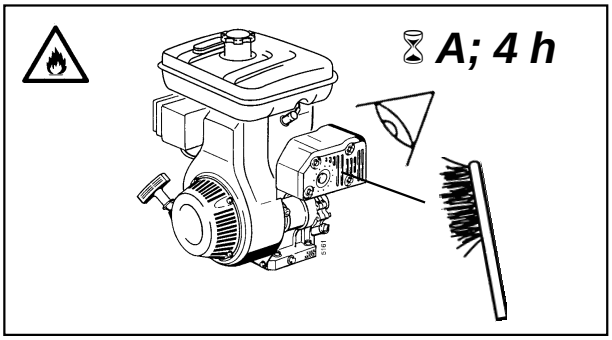
Clogging of dirt and dust may occur to the cooling system. This may heat up and damage the engine.

- *Regularly check the cooling-air screen (C/7 or D/7) and clean from dust and sucked-in plant trash.*



- *Remove the fan case **at least once a year,** preferably before the season starts and clean the cooling fins on cylinder, cylinder head, guide plates and cooling-air screen, both serving for good air circulation.*

→agria - Service←



Exhaust

Regularly clean surrounding parts of muffler (C/9 or D/9) Free from grass, dirt and inflammable deposits.

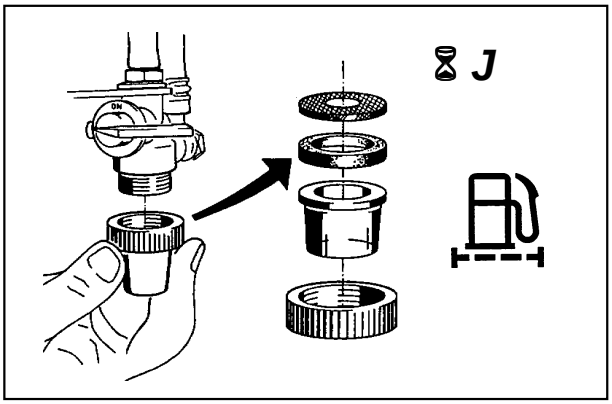
Danger of fire!

5

Fuel Hoses

*Exchange after every **2 years,** Exchange leaking fuel hoses immediately.*

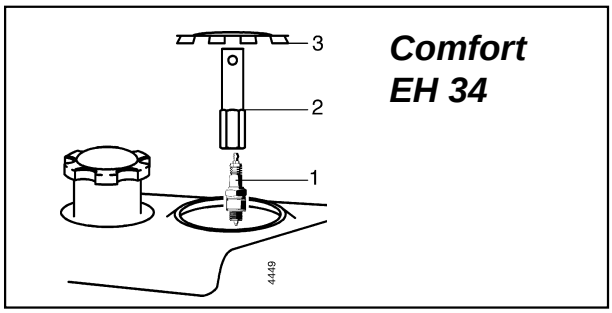
Cleaning the Fuel Strainer



*Check the strainer on the fuel tap (C/3) at least **once a year** for water and other impurities.*

- *Close the fuel tap.*
- *Remove the fuel strainer and remove the impurities, replace if damaged.*
- *Rinse the strainer container in fuel.*
- *Then screw it back on correctly, to avoid fuel leakage.*

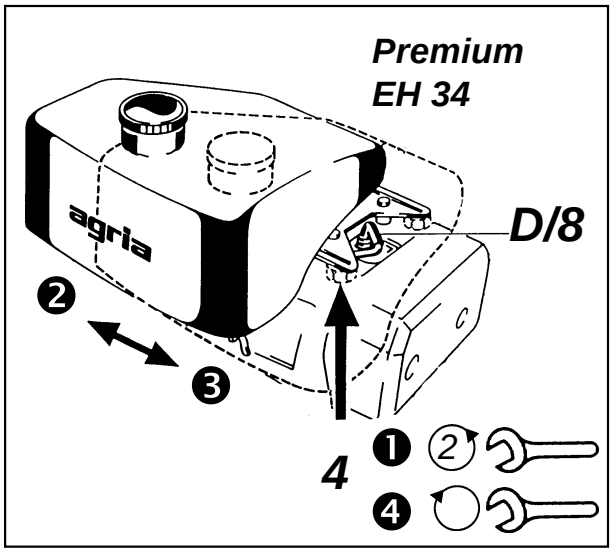
Cleaning the Spark Plug and Readjusting the Electrode Gap



Grizzly Comfort

The spark plug (C/8) is arranged underneath the fuel tank:

- remove cover (3).



Grizzly Premium EH 34

The spark plug (C/8) is arranged underneath the fuel tank:

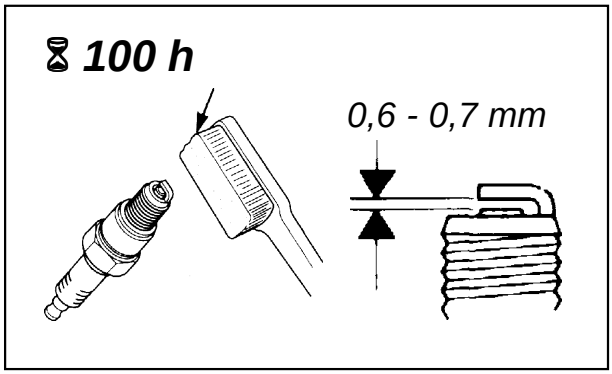
❶ *Loosen the 4 fastening nuts (4) on the tank console and open approx. 2 turn.*

❷ *Slide fuel tank to the air filter side.*

Slide back:

❸ *Slide tank back to exhaust side.*

❹ *Tighten fastening nuts.*



*After every **100** operating hours or ignition problems:*

- *Clean the electrodes on the spark plug from dust and dirt using a wire brush.*
- *Check spark plug gap and, if necessary, readjust it to 0,6 - 0,7 mm.*

*Exchange the spark plug at approx. **200-hour intervals**.*

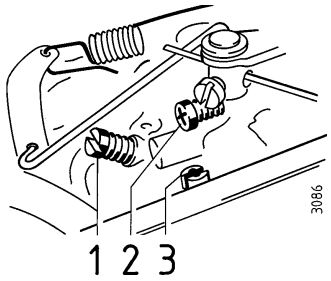
5

Cleaning the Cylinder Head

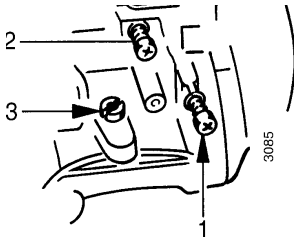
*After every **400** hours of operation take off cylinder head and remove carbon deposits on the cylinder head, piston crown and valves with a steel brush. Afterwards, clean with soft brush. Exchange the gasket and reassemble it to the cylinder head. Tighten cylinder head screws in turn at **25 Nm**.*

→agria - Service←

Engine EH 25 D



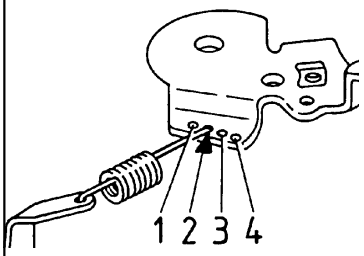
Engine EH 34 D



1 Idling speed mix control screw
2 Idling speed control screw
3 Idling speed air jet

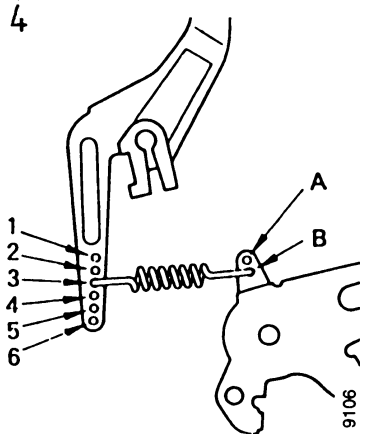
Engine EH 25 D

Governor spring in hole 2



Motor EH 34 D

Reglerfeder in Loch 3 und B



Readjusting the Valve Lash

*After every **400** hours of operation, readjust the valve lash. Intake and outlet valve are at 0.08–0.11 mm when the engine is cold.*

→agria - Service←

Cleaning the carburettor

*Clean the carburettor every **400** operation hours and then readjust the idle speed.*

→agria - Service←

Idle speed adjusting

Always ensure that idling-speed is adjusted correctly. With the speed control lever set to idle, the engine is supposed to run smoothly and without run-out at low engine speed.

At low speeds, the engine is supposed to continue running smoothly when the speed control lever is at a stop in idling. Adjust the engine speed while the engine is still warm from operation. For this purpose, readjust the limiter screw (2) and the mix control screw (1) for idling speed. Then turn the attachment or adjusting screw to adjust the throttle cable for no play. (For idling speeds refer to "Specifications").

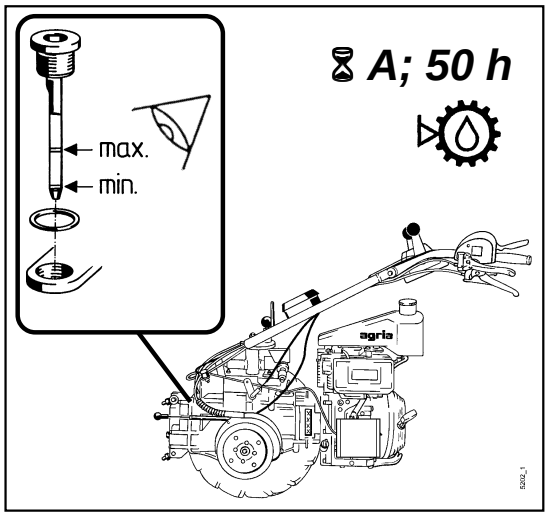
Adjustment **→agria - Service←**

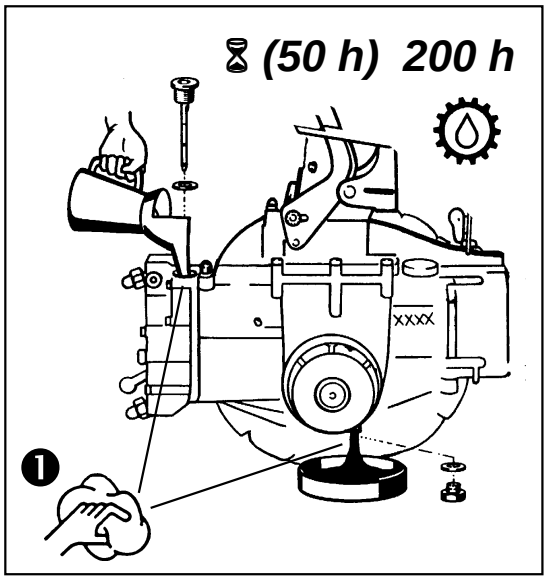
Governor

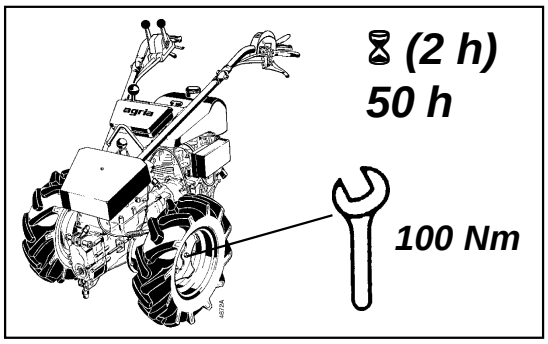
For proper function of the engine speed governor and to adjust the upper idling speed, the governor spring has to be in the appropriate hole, see fig.

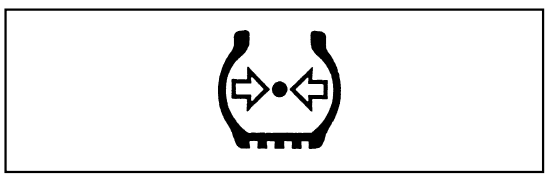
⚠ Any changes to the position of the spring increases the risk of accident and will render the warranty and type approval null and void!

Keep governor spring, lever and linkages free from dirt and plant trash at all times.









Machine

Gearbox

*Check **transmission oil level** before you take up operation and after every **50** operating hours (oil dipstick (A/10).*

*The machine parked in horizontal position, the oil level is between the notches **max.** and **min.** .*

- *Remove oil dipstick, clean with a clean cloth and put it back in.*
- *Remove the dipstick again and read the oil level, refill transmission oil, if necessary.*

***Change transmission oil** after the first **50** operating hours and after every **200** operating hours while the engine is still warm.*

❶ *Clean the oil filler plug (A/10) and the drain plug (A/13) as well as the surrounding parts.*

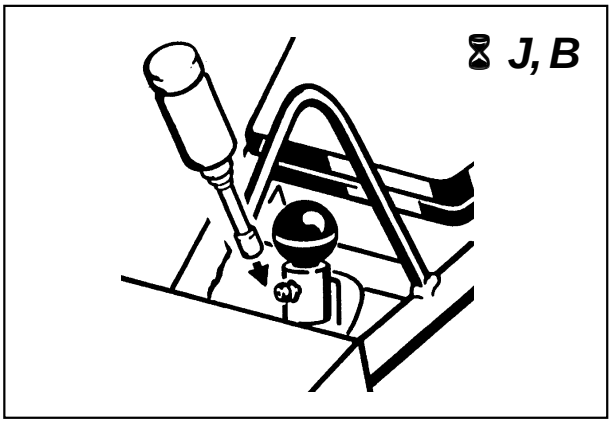
❷ *Change oil, collect the old oil in a proper container and dispose of properly.*

ⓘ ***Check and exchange o-rings, if necessary. Tighten the drain plug!***

For filling quantity and oil quality refer to "Specifications".

Drive wheels

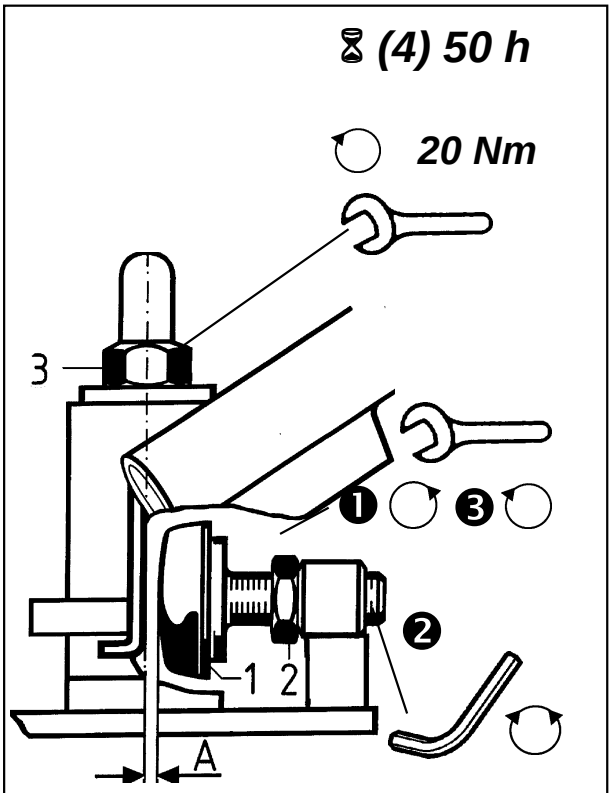
- *When **commissioning** the mower and each time you **change wheels**, check and tighten wheel bolts and nuts after the first **2** operating hours with **100 Nm**; Proceed likewise when doing maintenance work.*
- *Retighten the wheel flange locking nuts (A/12) after the first **2** operating hours, then every **50** operating hours with **100 Nm**.*
- *Check the tyre air pressure regularly. For smooth driving, make sure that there is the same pressure in both tyres.*



Steering Handle Locking Bolt

*Occasionally lubricate nipple on locking bolt of steering handle with Bio-lubrication grease. Lubricate at least **once a year** and after cleaning with air-compressed water jets.*

Grizzly compact, comfort



1 Lock nut for stop buffer
2 Stop buffer
3 Adjustment nut for steering handle central mounting

Steering Handle Central Mounting

*Re-tighten adjustment nut (3) with **20 Nm** after the first **4** operating hours, then after every **50** operating hours.*

Steering Handle Pendulum Stop

*This **steering handle bearing** provides optimum dampening, when the two stop buffers are adjusted to a play of **A = 0.5 mm** (in position zero, with no load on steering handle) between stop plate and buffers.*

However, the pendulum stop can also be set to provide a rigid steering handle (without play).

Adjustment:

❶ *Loosen hexagonal nuts (2).*

❷ *Adjust stop buffer (1) by turning it to the above stated play "A".*

❸ *Re-tighten hexagonal nuts (2) (lock)*

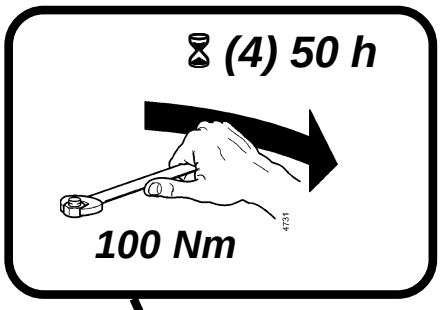
5

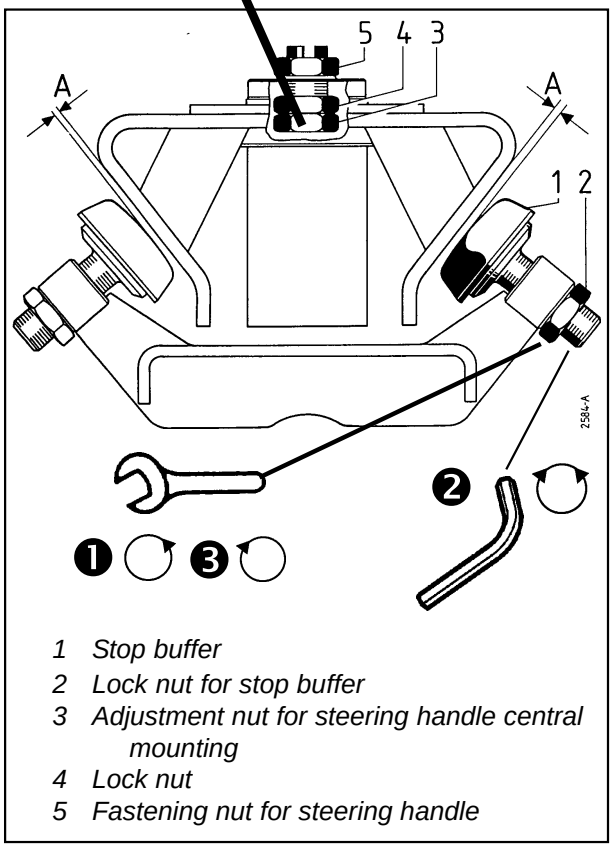
Grizzly premium

Steering Handle Central Mounting

*Re-tighten adjustment nut (3) with **100 Nm** after the first **4** operating hours, then after every **50** operating hours.*

- *Remove pin retention to unscrew fastening nut for steering handle (5).*
- *Remove steering handle and place aside.*
- *Loosen lock nut (4).*
- *Tighten adjustment nut (3) with **100 Nm**.*
- *Re-tighten lock nut (4) (lock).*
- *Mount steering handle. Brush some lubrication grease onto gliding faces, if necessary.*
- *Screw on fastening nut (5) until steering handle is without play but can still be swivelled. Secure with pin.*





1 Stop buffer
2 Lock nut for stop buffer
3 Adjustment nut for steering handle central mounting
4 Lock nut
5 Fastening nut for steering handle

Steering Handle Pendulum Stop

*This **2-axle-steering handle bearing** provides optimum dampening when each of the two stop buffers is adjusted to a play of **A = 0.5 mm** (in position zero, with no load on steering handle) to the stop plate.*

Adjustment:

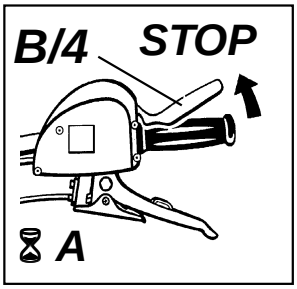
❶ *Loosen hexagonal nuts (2).*

❷ *Adjust stop buffer (1) by turning it to the above stated play.*

❸ *Re-tighten hexagonal nut (lock).*

Safety Circuit

Check dead stop for proper function each time you take up operation and each time you do maintenance work on the machine.



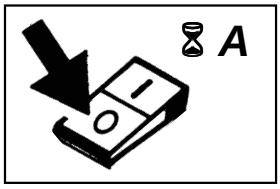
- *With clutch engaged and upon release of safety lever (B/4), the engine must automatically come to a stop.*

- *Check electric conductors and connections for good condition, exchange, if necessary.*

→agria - Service←

Engine-Off-Switch

Check engine-off-switch for proper function each time you do maintenance work on the machine.



- *With the engine-off-switch in position „0“, the engine must come to a stop.*

- *Check electric conductors and connections for good condition.*

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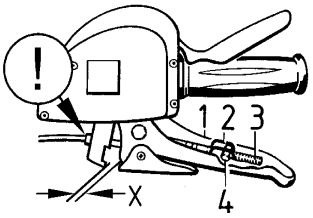
5

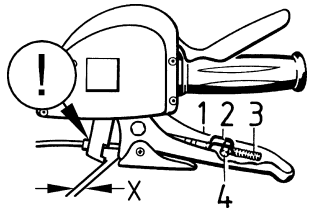
Adjustments on Hand Levers

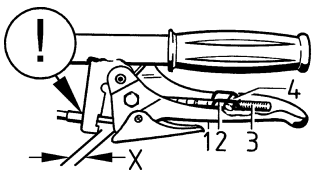
Check clutch play or adjustments each time you operate the machine. If necessary, readjust (especially after commissioning the machine, during break-in period, and after exchanging clutch linings).

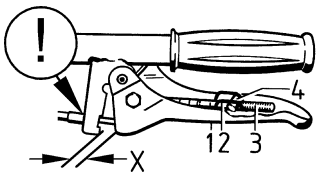
EH 25 A

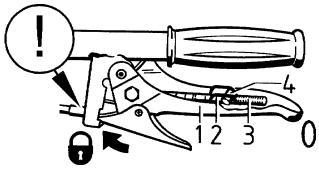


EH 34









1 Hand lever
2 Retaining spring
3 Threaded end of cable
4 Adjusting pin

Clutch:

X = 3 - 5 mm (Clutch play)

***!** = The Bowden cable must be placed in the hand lever support on **top** position!*

***!** = The Bowden cable must be placed in the hand lever support on **bottom** position!*

Diffential gear, Central brake, Steering brake:

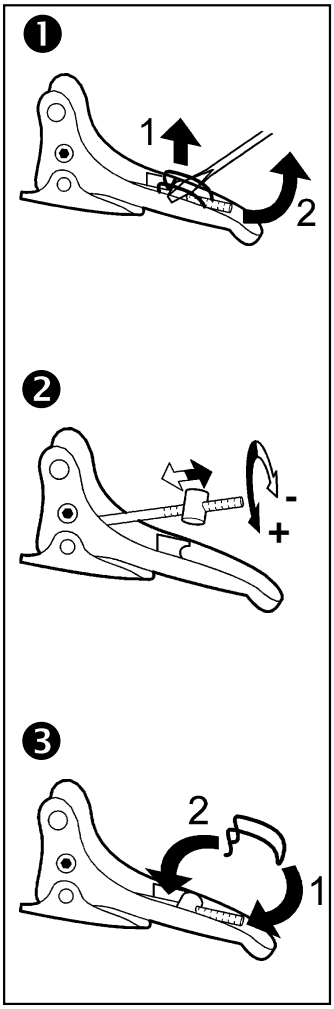
X = 3 - 5 mm

***!** = The Bowden cable must be placed in the hand lever support on **bottom** position!*

Hand lever for F/R shifting:

Adjust Bowden cable in such a way that transmission is set to neutral when pawl is locked.

***!** = The Bowden cable must be placed in the hand lever support on **bottom** position!*



Adjustment:

❶ *1. Remove retaining spring (2).*

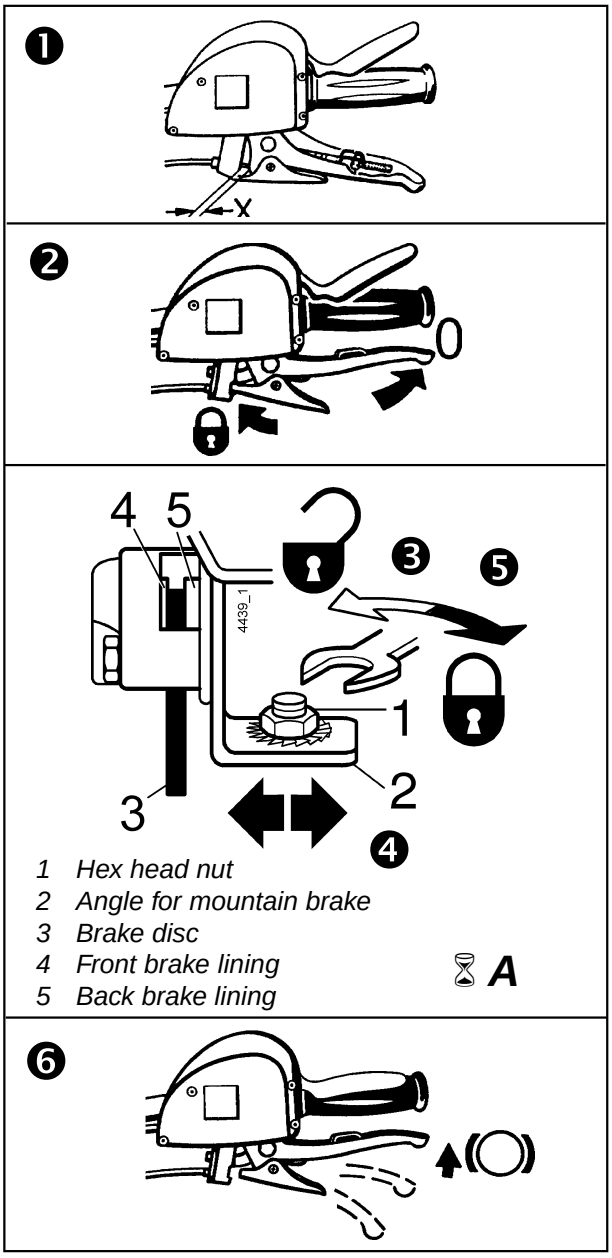
2. Remove cable end (3) and set pin (4) out of bracket in hand lever.

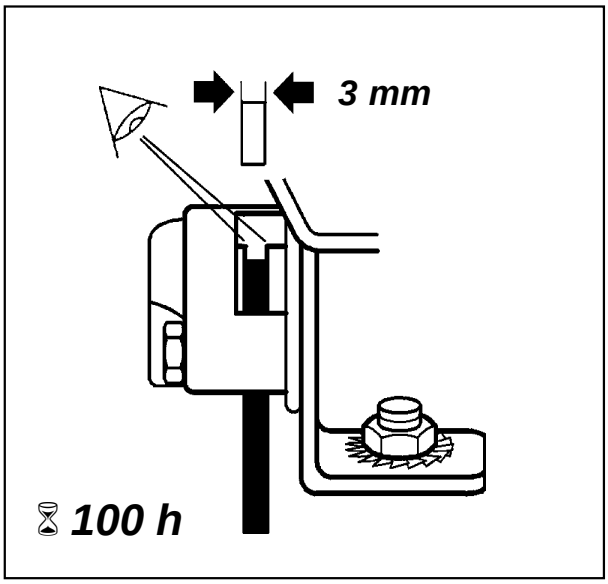
❷ *Screw the set pin (4) in or out (+ -) to a play of X or idle is present in position 0.*

❸ *1. Place cable end and set pin back into bracket.*

2.Fit retaining spring (2).

5





Safety Hillholder

● *Every time you start operation, check the mountain brake on proper function.*

Adjustment

❶ *Adjust clutch.*

❷ *Place the clutch hand lever on position "0" (pawl locked).*

❸ *Loosen the hex head nuts (1) on both sides.*

❹ *Move the park brake carter against the brake disc (3) by a slight pressure on the brake carter until the brake shoe (4) fits slightly.*

❺ *Fasten the hex head nuts (1) on both sides.*

❻ *Check the brake function, readjust if necessary.*

❼ *Check the brake free wheel.*

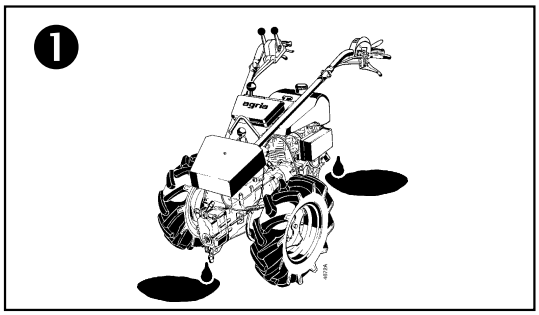
● *F-R shifter on "idle"*
● *Clutch on "0"*
● *The brake disc must turn easily by hand, readjust if necessary.*

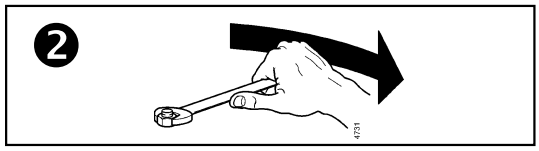
Check brake lining

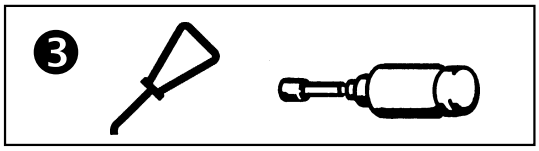
*Every **100** operating hours check the brake linings (4 + 5) on wear and tear (visual check). The linings should have a min. thickness of 3 mm, replace the linings if necessary.*

Replace brake lining

● *Loosen and unscrew the hex head nut (1) on both sides.*
● *Dismount the angles (2) with discs and brake housing.*
● *Replace the brake linings (4 + 5).*
● *Mount the park brake in the opposite order.*
● *Adjust.*







General Maintenance

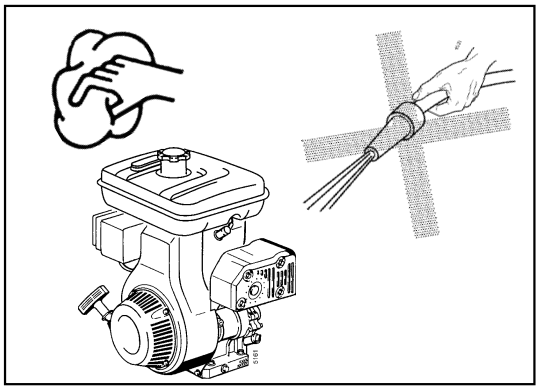
❶ *Every time You take up operation watch out for fuel and oil leakage, repair if necessary.*

❷ *Regularly check bolts and nuts for tight fit, re-tighten, if necessary.*

*After every **50** operating hours, at least **once a year** and after cleaning:*

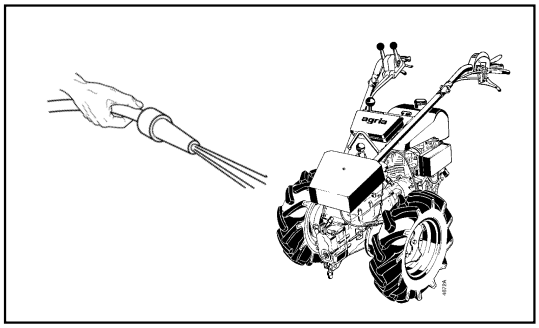
❸ *Lubricate all gliding and moving parts with Bio-lubricating grease or Bio-lubricating oil (e.g. speed control lever, handle bearing etc.).*

Cleaning



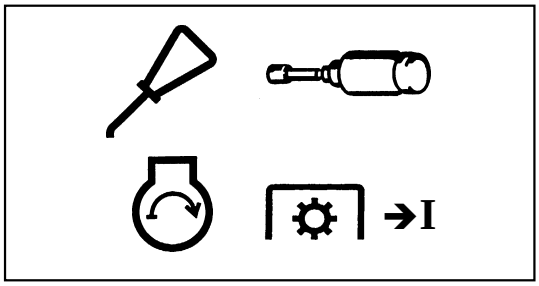
Engine

Clean engine only with a cloth. Avoid spraying with water jets, as water might penetrate into ignition and fuel system and cause malfunctions.



Machine

After each cleaning (spraying with water, expecially with air-compressed water jets) lubricate all lubrication points, oil and let tool carrier run for a short time to press water out.



Apply grease generously to leave a grease ring around bearings to prevent water, plant sap, and dirt from penetrating.

Storage

For longer periods of no operation:

a) Clean thoroughly
Repair paint coat

b) *Spray* ***all shining parts****, in particular cutter bar, with Bio-slushing oil.*

c) Engine preservation

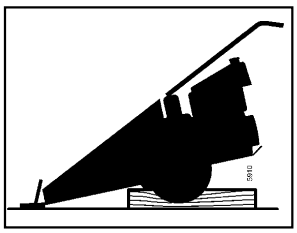
- *Drain the fuel completely from the system* ***or*** *fill the fuel tank and add stabilisator (agria No. 799 09) to the fuel tank*

- Observe instructions.
Operate the engine for approx. 1 minute.

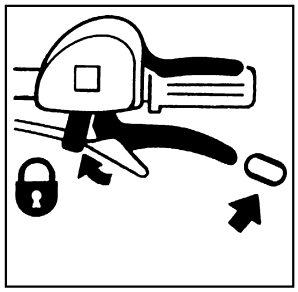
- *Change the engine oil.*
- *Fill a teaspoon of engine oil (approx. 0.03l) into the spark plug opening. Slowly crank the engine.*
- *Reinstall the spark plug and set the valves on compression using the recoil starter (Pull the starter rope until you feel resistance), the valves are closed.*
- *Crank the engine slowly at 2–3 week intervals (spark plug connector is removed!) and set the valves on compression again.*

d) Drive-wheels

Support drive-wheels in such a way that tyres have no ground contact. Pneumatic tyres are quickly destroyed, if left standing under load and uninflated.



e) Clutch

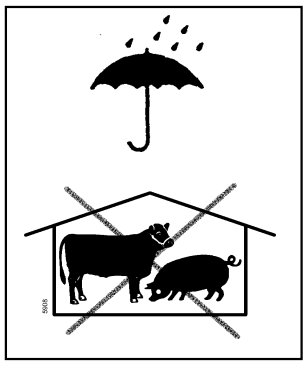


Always park mower with hand clutch lever pulled (pawl locked in place). Otherwise, clutch problems may result due to corrosion.

f) Storing the machine

To avoid severe corrosion:

- to preserve the machine from atmospheric influences



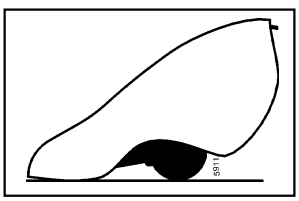
Do not park the machine in:

- humid rooms

- in rooms where fertilizer is stored

- in stables or adjacent rooms.

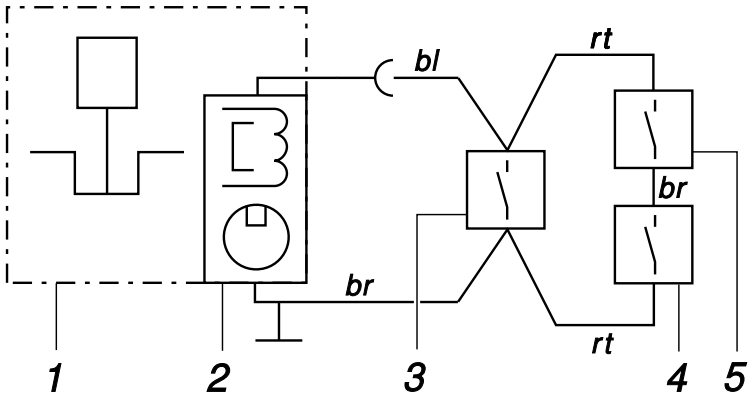
g) Protect machine



with cloth or a similar cover.

5

Electric Circuit



Safety Circuit

1 Engine
2 Magnet ignition system
3 Engine-off-switch
4 Switch in clutch lever
5 Switch in safety lever

bl = blue
br = brown
rt = red

Observe safety instructions! Have all serious malfunctions on the machine or engine repaired by your agria workshop. They have the proper tools. Improper repairs can only add to the damage.

Problem	Possible cause	Possible solution		Page
Petrol Engine:				
Engine does not start	- Spark plug connector not connected	Connect spark plug connector		
	- Choke is not in right position	Set Choke to right position		34
	- Engine-off-switch is set to “0”	Set engine-off-switch to “I”		34
	- Safety circuit is not set to start position	Set safety circuit to start position		34
	- Fuel tank empty or poor fuel	Fill fresh fuel		33
	- Fuel line clogged	Clean fuel line		40
	- Defective spark plug	Clean, adjust or exchange spark plug		41
	- Engine too much fuel (“flooded engine”)	Dry and adjust spark plug and start at full throttle		41
	- Engine-off-line defective	Check line and connections	✶	
	- Inleaked air due to loose caburetor and suction line	Tighten fastening screws		
Misfirings in engine	- Engine running in CHOKE range	Set CHOKE-lever to operating position		34
	- Loose ignition cable	Fix ignition cable retaining device, fit connector tightly on ignition cable, fit connector tightly ojn spark plug		
	- Clogged fuel line or poor fuel	Clean fuel line, fill fresh fuel		40, 33
	- Vent opening in fuel tank cap clogged	Exchange fuel tank cap		
	- Water or dirt in fuel system	Drain fuel and fill fresh fuel		
	- Air filter clogged	Clean air filter or exchange		39
	- Carburetor misadjusted	Re-adjust carburetor	✶	42
Excessive temperature in engine	- Low engine oil level	Refill oil immediately		38
	- Impaired cooling	Clean cooling fan grid, clean internal cooling ribs		40
	- Air filter clogged	Clean air filter		39
	- Carburetor misadjusted	Re-adjust carburetor	✶	42
Misfirings in engine at high speeds	- Short firing intervals	Adjust spark plug		41
	- Incorrect idle mixture	Adjust carburetor	✶	42
Engine frequently stalls in idle	- Firing interval too long, defective spark plug	Adjust or replace spark plug		41
	- Carburetor misadjusted	Re-adjust carburetor	✶	42
	- Air filter clogged	Clean air filter		39

Problem	Possible cause	Possible solution		Page
Engine does not run smoothly	- Speed control linkages clogged or jammed	Clean speed control linkages		42
Engine does not stop when set to stop	- Defective engine-stop-line, earth missing	Check line and connection, check earth contact		
Engine output too low	- Air filter clogged	Clean air filter		39
	- Loose cylinder head or damaged sealing	Tighten cylinder head, exchange sealing	✶	
	- poor compression	Have engine checked	✶	
Machine in General:				
Clutch does not decouple	- Hand clutch lever misadjusted	Adjust clutch free play		47
Clutch slips	- Hand clutch lever misadjusted	Adjust clutch free play		47
	- Worn out clutch	Exchange clutch disc	✶	
Excessive vibration	- Loosened screws	Tighten fastening screws		49

✶ = For this purpose contact your agria workshop.

agria Order No.

Fuel stabilizer

799 09	*Fuel stabilizer*	*pouch*	*5 g*

Varnishes

181 03	*Spray varnish birch-green*	*spray tin*	*400 ml*
712 98	*Spray varnish red, RAL 2002*	*spray tin*	*400 ml*
509 68	*Spray varnish black*	*spray tin*	*400 ml*

Glues (for screw fastening), Surface Sealing

559 94	*Glue (medium) LOCTITE 242*	*bottle*	*50 ml*
559 95	*Glue (strong) LOCTITE 270*	*bottle*	*50 ml*
559 96	*Glue (ultra strong) LOCTITE 638*	*bottle*	*50 ml*
559 97	*Surface sealing (liquid) LOCTITE 573*	*tube*	*250 ml*

Wear Parts

Engine

707 91	*Air filter set (paper element + preliminary filter)*	
671 87	*Spark plug, Bosch WR7AC*	*for EH 25D*
707 92	*Spark plug, Bosch WR7CC*	*for EH 34D*
684 16	*Sealing washer (engine oil dip-stick)*	
009 05	*Sealing washer 14 x 20 x 1.5 (engine oil drain screw)*	

Transmission

009 16	*Sealing washer 16x22x1.5; oil dip-stick and oil drain plug*

Emergency Tyre Repair

713 13	*Tyre repair gel Terra-S*	*bottle*	*1 l*

Lists of Spare Parts

997 024 Tool carrier 5500
997 083 Attachments for 3400/5500
997 077 Robin Engines

Fig. C

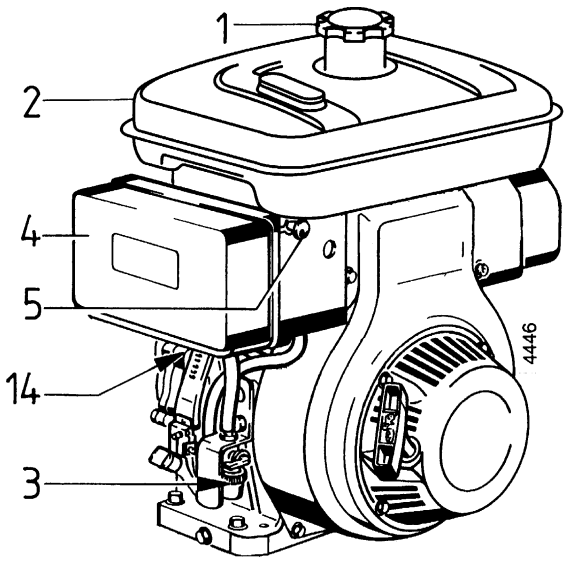
Grizzly compact, premium Engine EH 25D

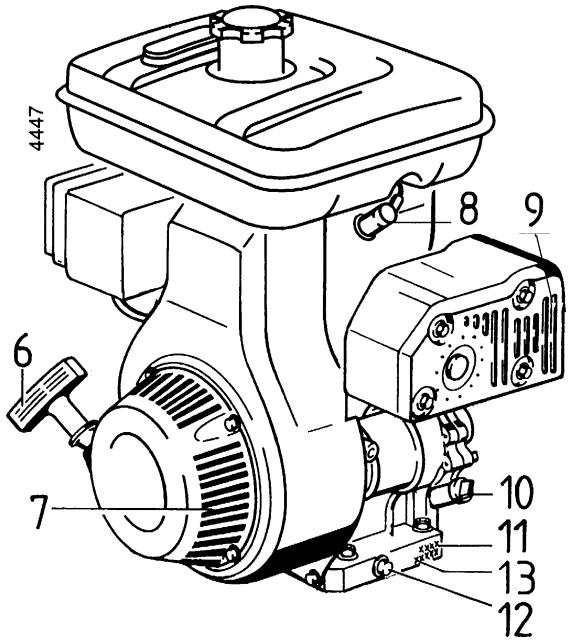
Grizzly comfort EH 34D

1 *Fuel tank cap*
2 *Fuel tank*
3 *Fuel tap*
4 *Air filter*
5 *Choke pull-out knob*
6 *Starter handle*
7 *Recoil starter/cooling-air screen*
8 *Spark plug*
9 *Exhaust*
10 *Engine oil filler neck with oil dip-stick*
11 *Engine type no.*
12 *Engine oil drain plug*
13 *Engine ID no.*
14 *Speed control lever and linkages*

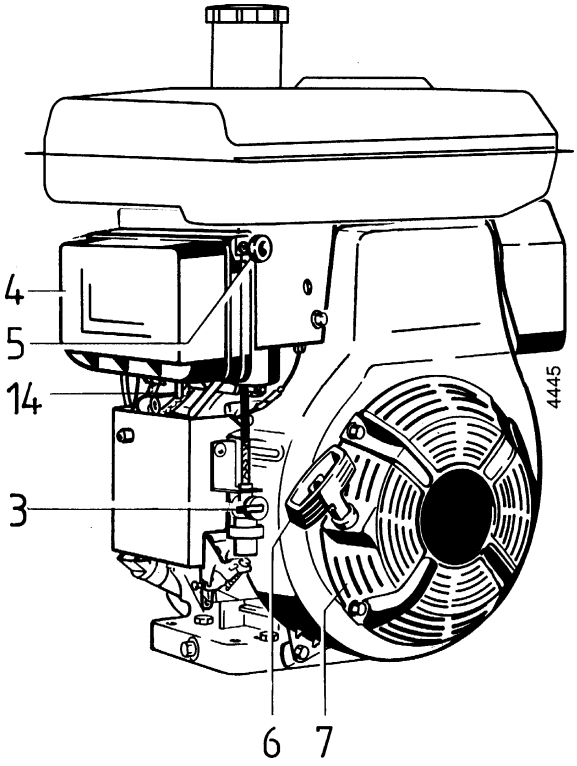
Fig. C

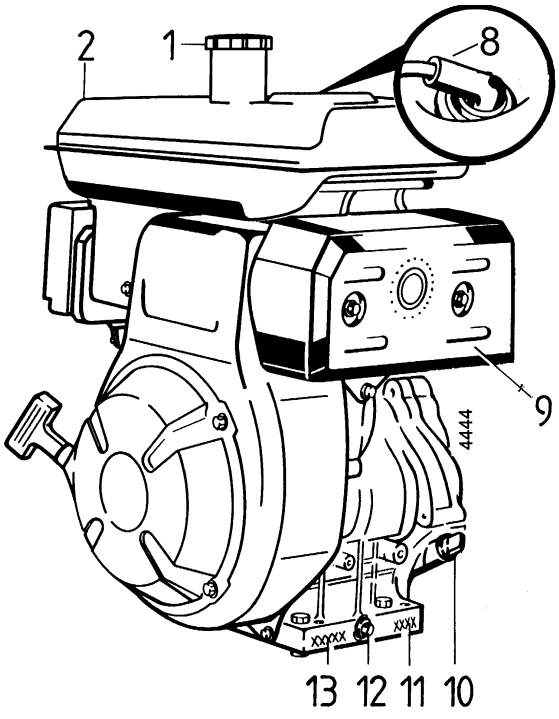
Grizzly compact
Grizzly premium
Engine EH 25 D

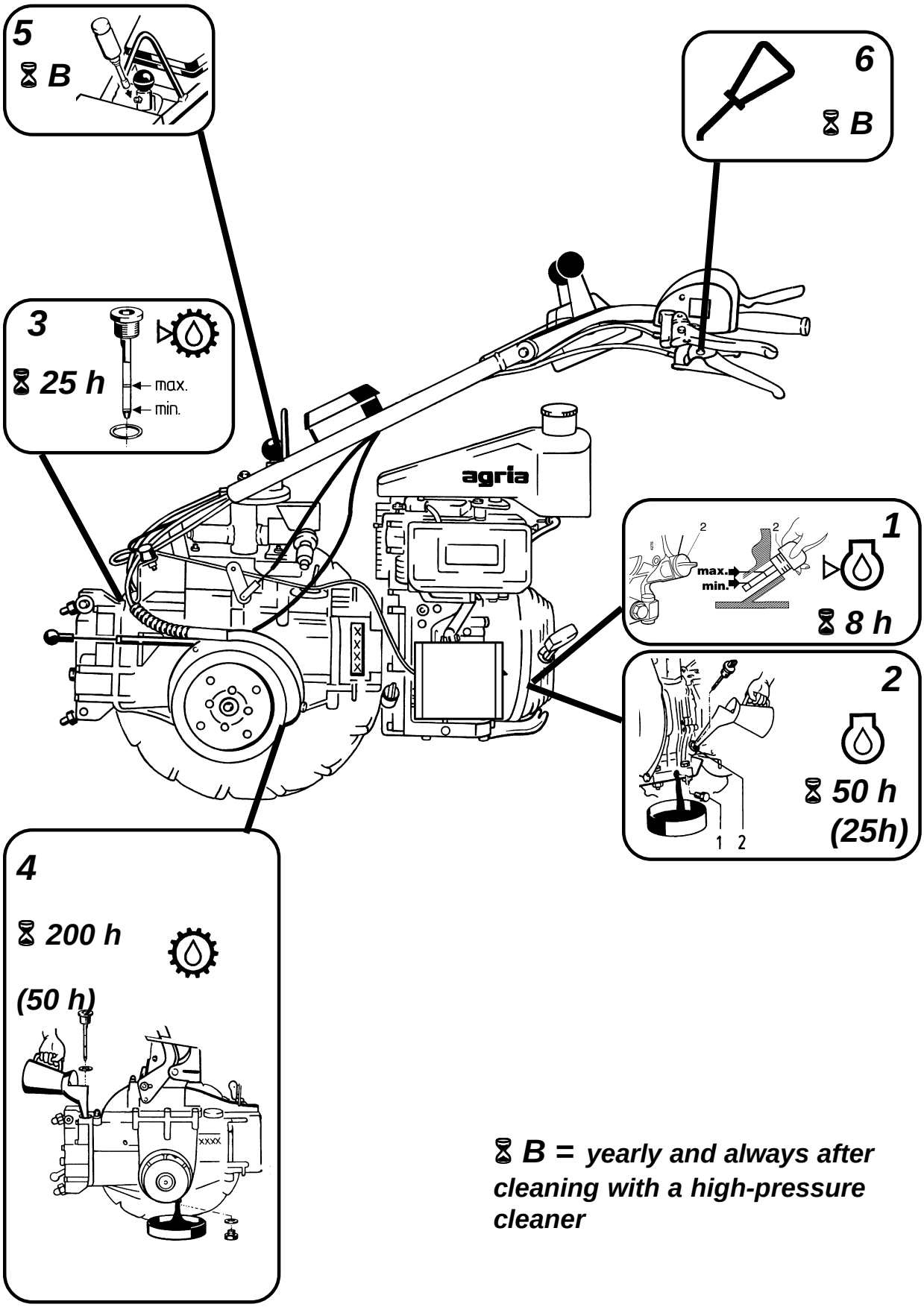




Grizzly comfort
Motor EH 34







B = ***yearly and always after cleaning with a high-pressure cleaner***

	P	A	Always after operating hours								min. every 3 months	min. yearly	B	page
			2	4	8	25	50	100	200	400				
Check bolts and nuts		K	K											49
Clean surrounding parts of exhaust		K		K										40
Check air-filter		K												39
Clean cooling-screen		K												40
Check steering handle pendulum stop		K												44,45
Check safety circuit function		K												46
Check engine shut-off switch function		K												46
Check clearance of hand levers		K												47
Check function of safety hillholder		K												48
Check engine oil level, refill, if necessary	1	K			K									38
Check transmission oil level	3	K					K							43
Tighten wheel bolts and nuts			K											43
Retighten hex nuts for wheel flanges			K				K							43
Tighten steering handle central clamping				W			W							44,45
Cleaning						K								49
First engine oil change,	2					W								38
subsequent oil changes	2						W							38
Clean air-filter insert							W				W			39
Lubricate all sliding parts	6						K					K	K	49
First transmission oil change,	4						W							43
subsequent oil changes	4								W					43
Lubricate differential hubs of twin-wheels								K					K	30
Clean spark plug, adjust electrode gap								K						41
Check brake liners of safety hillholder								K						48
Clean guide plates, cooling fins – earlier, if required								F				F		40
Replace spark plug									K					41
Replace air filter insert, earlier, if required									W					39
Clean carburetor and adjust idle speed										F				42
Clean cylinder head										F				42
Adjust valve clearance										F				42
Grease steering handle locking bolt	5											K	K	44
Replace fuel hoses												W*		40
Clean fuel strainer												W		40

P = Item in lubrication chart
A = Each time before you take up operation
B = After each cleaning, in particular with high-pressure cleaner
K = Checks and maintenance to be executed by operator
W = Maintenance to be executed by professional workshop
F = Maintenance should be carried out by your agria workshop
** = after 2 years*

Fig. D

Grizzly premium

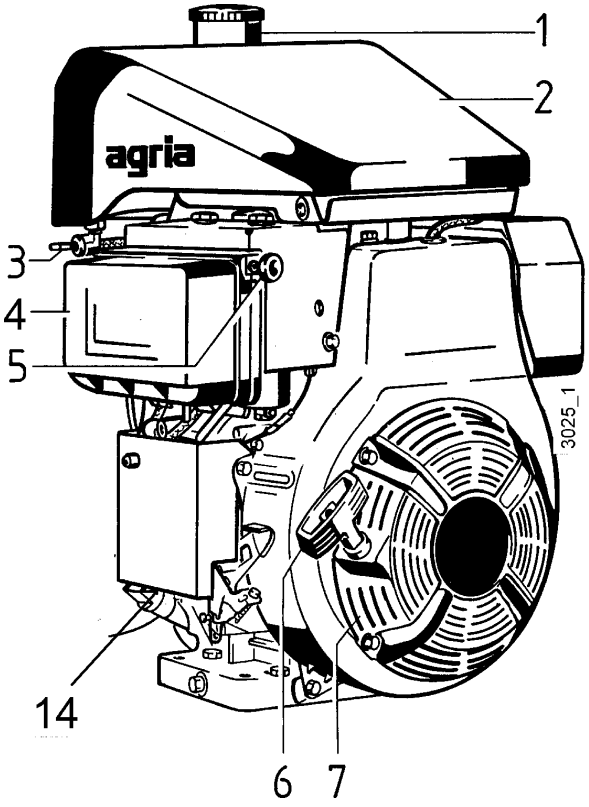
EH 34D

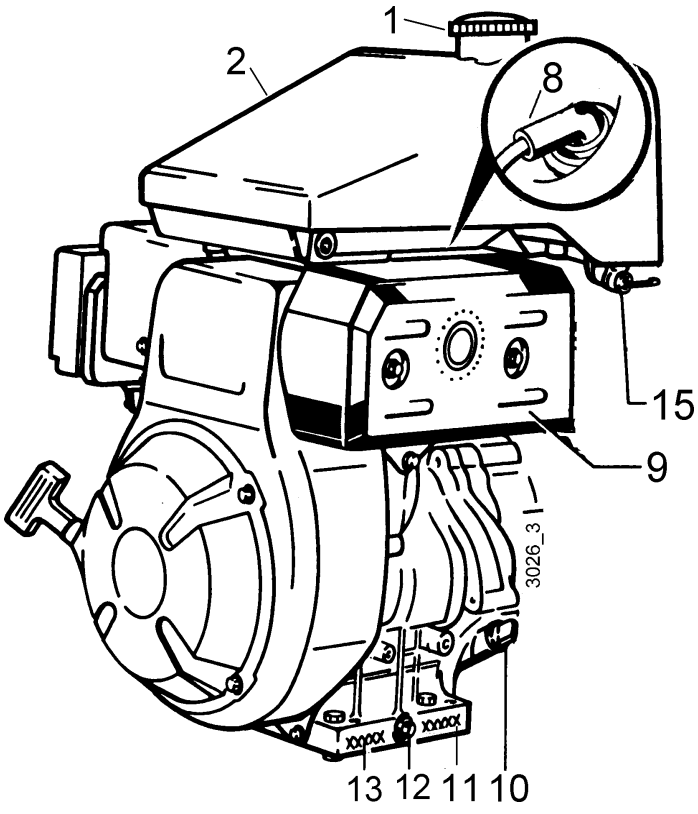
1 *Fuel tank cap*
2 *Fuel tank*
3 *Fuel tap*
4 *Air filter*
5 *Choke pull-out knob*
6 *Starter handle*
7 *Recoil starter/cooling-air screen*
8 *Spark plug*
9 *Exhaust*
10 *Engine oil filler neck with oil dip-stick*
11 *Engine type no.*
12 *Engine oil drain plug*
13 *Engine ID no.*
14 *Speed control lever and linkages*
15 *Fuel tap*

Fig. D

Grizzly premium

Motor EH 34 D





Declaration Conformity

agria

EG-Konformitätserklärung
EC Declaration of Conformity
CE Déclaration de conformité
EG conformiteitsverklaring

(D)	(F)	(GB)	(NL)
Wir	*Nous*	*We*	*Wij*

agria-Werke GmbH
Bittelbronner Str. 42
D-74219 Möckmühl/Württ.

erklären, dass das Produkt	*déclarons que le produit*	*herewith declare that the product*	*verklaren dat het produkt*
Geräteträger	***Porte-outils***	***Tool carrier***	***Werktuigdrager***

5500 341, -342, -411, -412, -413, -414, -421, -422, -641, -642

mit allen einschlägigen Bestimmungen der EG-Maschinenrichtlinie ***2006/42/EG*** *in Übereinstimmung ist.*	*est conforme à toutes les exigences respectives selon la directive relative aux machines* ***2006/42/CE.***	*conforms to all relevant specifications of the Directive on Machinery* ***2006/42/EC.***	*voldoet aan de desbetreffende bepalingen van de EG-machinerichtlijn* ***2006/42/EG.***
Die Maschine ist auch in Übereinstimmung mit allen einschlägigen Bestimmungen der folgenden EG-Richtlinien: ***2004/108/EG, 2000/14/EG***	*La machine est aussi conforme à toutes les exigences respectives selon les directives CE suivantes:* ***2004/108/CE, 2000/14/CE***	*It is also conform to all relevant specifications of following EC directives:* ***2004/108/EC, 2000/14/EC***	*De machine voldoet ook aan de desbetreffende bepalingen van het volgende EG-richtlijnen:* ***2004/108/EG, 2000/14/EG***
Folgende harmonisierte Normen (oder Teile davon) oder techn. Spezifikationen wurden angewendet:	*Les normes harmonisées (ou extraits de celles ci) ou les spécifications techniques suivantes ont été appliquées:*	*Following harmonized standards (or parts of it) or technical specifications have been applied:*	*De volgende geharmoniseerde normen (of delen ervan) of technische specificaties werden toegepast:*

EN 12733: 2001 + A1: 2009

Möckmühl, den 18.01.2010

Siegfried Arndt	*Rudolf Tigges*
Geschäftsführer	*Leiter Entwicklung & Konstruktion*
Directeur	*Responsable développement et études*
Managing Director	*Head, Research and Development*
Bedrijfsleider	*Hoofd ontwikkeling en constructie*

Herr Tigges ist bevollmächtigt die technischen Unterlagen zusammenzustellen.
Monsieur Tigges est habilité à agencer la documentation technique.
Mr. Tigges is authorized to assort the technical documents.
De heer Tigges is gemachtigd om de technische documentatie op te stellen.
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